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1. ANNEXURES TO SCOPE OF WORK

1.1. Annexure I: Key Processes

1.1.1. Repository Participant ('RP') Management

1.1.1.1. Who can be Repository Participant ('RP')

In the depository system, the Depository Participant (DP) plays a vital role of providing various services to the users of the depository system. All DPs are agents of the depository and act as intermediaries for directly servicing the account holders across the country. The role of Depositary Participants was envisaged in the capital markets to provide the investors easy access to depository services; especially taking into account that all investors will not be able to deal online with the depository and it will be impossible for the depository to establish the required number of offices to service the clients across the country have the system operational **pan India in a short time**. Further these investors who wish to trade or borrow against the shares they hold would desire Depositories service and accordingly SEBI has permitted brokers as well as banks to be Depository Participants.

The design of the repository system for servicing eNWR market may take into consideration the current market conditions and provide for a strong foundation to meet the challenges of how the commodity market will evolve over period of time.

The warehouse operators can also act as the RPs. This appears quite convenient and relevant in the current market situation wherein most of the users will be traders or farmers who will want to open the account to deposit goods in the warehouse, take delivery of goods and enter into pledge transactions for loan against warehouse receipts, etc. However there are many reasons for considering other entities also to be allowed to act as RPs as under:

- Any bank or financial institution that provide loan against eNWRs, will also have to open a repository account. Most of the financial institutions, because of their internal rules would not be allowed or prefer to open their account with a warehouse. They may either want to be a RP themselves or open with another non-warehouse RP.

- Some of the traders who want to open their repository accounts may not want to have their account managed by a warehouse operator on account of the worry that many warehouse operators are also players in the commodity market and they would not want their information to be seen by such entities.

- As the market matures many of the account holders who open the account will be doing so only for trading on or off the market and may not have much requirement of depositing or delivering goods in warehouses. Such entities will require a service from intermediary location more convenient than at warehouses; and may even prefer to have their existing financial intermediaries to provide one stop service for all their assets.

For eNWR to gain currency a vibrant market is necessary where eNWR changes hands several time before expiry of validity period. This involves acting on large number of delivery

instructions of clients who have entered market only for trading, servicing clearing members who will actually settle trade in clearing mechanism of the exchange, provide required reports to frequent traders and financial institutions who lend against eNWR etc. activity which is not truly a core competency of Warehouse but that of brokers and such entities.

- The online account management by repository cannot be an alternate for entities who do want a substitute to warehouses because:
    a. Account opening should involve in-person verification of the customer and repository neither has the wherewithal nor has its own branch network to handle this load across the country
    b. All account holders may not be comfortable with pure online account management. They may prefer to issue instructions to a service provider for transfer. In such case, there is a need for a convenient service provider who will issue authorised delivery slips and accept delivery instructions after ensuring that they are acting only on the instruction of the account holder. Unless the account is serviced by the RP, it will not be in a position to enter an instruction in the repository system to make any amendment to the account information or to effect any transaction

There is a certain degree of conflict in the role of Warehouse and RP. While RP provides statement of account to client reflecting his/her holding of eNWR, it is a responsibility of warehouse to ensure that underlying commodity with quality as reflected by eNWR is indeed available and can be tendered to client on demand. When both functions are combined under single entity, there can be propensity for manipulation. It is akin to same entity doing function of maker and checker. This conflict is also relevant in securities market where broker is also Depository participant and therefore a need to maintain Chinese wall between two functions, separate compliance officer etc., is being imposed besides minimum net worth criteria and value of custody that broker DP can hold linked to its net worth is also imposed and account opening is suspended for such broker participant on breaching 90% threshold. It is therefore desirable that repositories can seek approval of WDRA for imposing certain stringent additional criteria for warehouses to act as RPs which could include compliance, supervision, net worth, technological competency etc.

1.1.2. Selection, Supervision and Monitoring of RP

- Only entities and financial intermediaries who are regulated by regulatory agencies specified by WDRA which at present include RBI, SEBI, PFRDA or IRDA.
- In case of warehouses, only those warehouses who meet certain additional eligible conditions will be allowed to act as RP. Even in such cases, they need to segregate their operations as the RP from their warehouse operations completely, that may include both at the technology and operational level.

- Repository is free to on-board any of the eligible entities as its RP. Once selected, it shall intimate the WDRA of the details of the RP. In case WDRA raises no objection, the RP can be allowed to commence repository business by Repository.
- WDRA reserves the right to inspect or call for records relating to RP and advice action with respect to the RP to the repository.
- The RP as the agent of the Repository will be functioning under the authority and supervision of the repository. The repository shall be responsible for the functioning of its RP and may put in place necessary risk containment measures in place, to the satisfaction of WDRA
- The repository shall submit to WDRA an annual summary of the audit of its RPs by giving details of performance and any exceptions during the period as prescribed by WDRA.
- WDRA shall on its own, or on the basis of the report of the audits of RP as submitted by the repository, undertake an audit of the RPs, either by its own officials or through an appropriate agency appointed for this purpose.
- The repository shall not be responsible for the actions of warehouses except with respect to its actions as RP if in case the warehouse has also been enrolled by the repository as an RP.

1.1.2.1. On boarding of Repository Participant

- RP shall apply to be on boarded in the repository as per the procedure issued by the Repository.
- RP shall fill online registration form available on the Repository System, scan & upload supporting documents, make e-payment for the fees and digitally sign the application
- The system should have provision for capturing details required for log-in to the portal. Certain mandatory details such as (illustrative):
  - o RP name
  - o Business Name
  - o Email ID: (Username)
  - o Mobile
  - o Business Address
  - o PAN
  - o Name of contact person
  - o Phone number, mobile number and email id of contact person
  - o AADHAR Number of authorized representative
- The system shall provide lookup tables for various fields in the form as assistance to the RP in filling the form with no error.
- The system should have provision to capture form details and signing of the same digitally using class 3 digital certificate owned by the RP

- System should allow the RP to complete the application and upload the documents. However, the system should not allow the registration to be completed without a digital signature

- The system should generate an application number on submission of the application form and supporting documents. This application number acts as an acknowledgement for the RP

- Alternatively once forms are submitted without digital signature, system should flag it as incomplete till the RP comes to the Repository and submit the documents along with signed acknowledgment generated by the system

- System should allow competent authority of the repository to accept / reject the application

- RP will be required to provide valid e-mail address for authorized person. A verification mail will be sent to RP's e-mail address to complete the Registration process.

- Once RP ID is generated online, it will be sent to RP's e-mail address along with one-time usage password.

- Upon first log-in, RP will be mandated to change the one-time usage password provided with registration.

- Repository shall manage all account opening related queries such as acceptance, verification and submission of documents, user access to the repository, and other account related services.

- Repository should set up a dedicated help line for assisting RP for account opening and account maintenance processes.

- The system should have a mechanism for allowing RP to reset their password.

- The repository participant is expected to sign a standard contract with the repository. The format of which shall be prepared by repository and approved by WDRA

1.1.2.2. RP Account Management

1.1.2.2.1. Account modification of RP

- For any modifications in RP details in Repository system, it shall initiate the account modification at the Repository System.

- RP shall submit the application for amendment at the Repository System.

- RP shall submit any required document or proof for the modification of the information online to the Repository Portal and digitally sign the supporting documents in addition to the Amendment application.

- The system should generate a change log with details like name of the user making the changes, timestamp of the request , etc., in case any change is made to the registration record

- Repository shall manage all the request for modification in the information of the RP contained in the repository systems.

- Once the amendment in RP account is accepted by the system after all validations are successful, a system generated message for confirming the changes to be sent to RP's authorized e-mail id and mobile number.

1.1.2.2.2. Closure of RP

- Repository shall close an account of the RP upon receipt of request from the RP or due to regulatory action by WDRA or by the Repository on its own accord.
- Repository shall initiate the closure process only where there are no eNWR outstanding in the name of the depositors' managed by that particular RP.
- Repository shall check that there are no lien marked on the eNWR in the name of the depositors managed by that particular RP.
- Repository shall ensure that all the clearing and settlement of eNWR on the stock exchanges have taken place before initiating the closure process of RP.
- Provided however, if the closure is due to regulatory action and the Repository is of the opinion that the closure of RP should be completed immediately, the Repository will take such necessary steps to take over the operations of the RP, even if RP does not meet the conditions mentioned above.
- It shall always be the endeavour of the repository to hasten the closure process without inconveniencing any users.

1.1.2.3. Reconciliation with Repository

- RP shall reconcile the total no of eNWR held in different accounts as the case may be, with its balance held in the repository on a daily basis.
- RP shall, at the end of each day, electronically provide to the repository the details of the changes made in the accounts of the client from the last EOD processing.
- RP shall electronically provide to the repository, the clients/ clearing members' details on receiving such a request from the repository for corporate actions or for any other purpose, as may be specified by the repository.
- Repository shall provide the total quantity of commodity held by its account holders for each commodity to WSP and WSP must certify that it has reconciled the same. Since a WSP will be registered with all repositories, it will be notified of all inter-repository transactions such as transfers and pledges. Based on receipt of such information from the repositories, the WSP will make suitable changes in its records to reflect the holdings across all repositories.
- In case the RP is accessing the data from repository and updating data directly on the repository system, then there will be an automated reconciliation with repository.

FOLLOWING PARAGRAHPS DEAL WITH VARIOUS FUNCTIONAL SPECIFICATIONS INCLUDING INTER-REPOSITORY TRANSACTIONS. THE PURPOSE OF PROVIDING THESE SPECIFICATIONS IS TO MAKE THE PROSPECTIVE APPLICANTS UNDERSTAND THE MINIMUM EXPECTATION OF WDRA TO OPERATIONALISE THE REPOSITORY OPERATIONS FOR eNWRs. THESE HAVE BEEN PROVIDED FOR GUIDANCE TO THE PROSPECTIVE APPLICANTS AND THE APPLICANTS ARE AT LIBERTY TO IMPROVE ANY OF THESE FUNCTIONS WITHOUT AFFECTING THE ULTIMATE OBJECTIVE.

1.1.3. Opening of Client account

Process 1: Account opening through RP

- Any person desiring to open an account with a Repository Participant shall make an application in the prescribed form.
- If the client is a non-individual entity, it needs to provide Digital Signature certificate issued by a certifying authority (CA) as part of the authentication process.
- Following are the options available with client for Registration:
  - o Option 1:
    - i. Client can fill the online registration form, scan & upload supporting documents, make e-payment for the fees.
    - ii. Client needs to physically visit RP. RP would input AADHAR ID of Client in his system.
    - iii. The verification of the client could be mobile based OTP or online biometric based verification of AADHAAR.
    - iv. For OTP based authentication, system would send an OTP to the registered mobile number of the Client. Client would share OTP received with RP.
    - v. Upon entering the OTP, RP would be able to see the information about Client which would be verified against the information in AADHAR card carried by Client.
    - vi. For non-individual entity, it needs to provide AADHAR ID of authorized representative. Same OTP based authentication will be applicable.
    - vii. Upon successful authentication, RP would start processing the application.
  - o Option 2:
    - i. Client can fill the online registration form and visit RP with acknowledgement received along with supporting documents and registration fees.
    - ii. RP official would verify the information, scan & upload supporting documents.
    - iii. Step ii to vii of Option 1 will be followed.
  - o Option 3:
    - i. Client can visit RP with required documents.
    - ii. RP official would fill online form; verify, scan & upload supporting documents and the client will make payment towards registration fees.
    - iii. Step ii to vii of Option 1 will be followed

- Repository Participant shall ensure that the application form submitted by the client is completely filled, including the Bank Account particulars of the client.

- Client may provide a valid e-mail address. A verification mail will be sent to Client's e-mail address to complete the Registration process. Once Client Account Number is generated online, it will be sent to client's e-mail address along with one-time usage password. E-mail id of client will be the user name for any further transaction online. Upon first log-in, client will be mandated to change the one-time usage password provided with registration

- RP shall open/activate client account in the repository system only after receipt of complete account opening form, KYC and supporting documents (identity proof, address proof) as specified by WDRA from time to time and when the application referred to above has been found to be valid and accepted by the RP it shall enter the data (on the application form) into the RPM (RP) and activate the client account.

- Client account number to be communicated to the registered e-mail address and registered mobile number as SMS.

- If client is desirous of receiving account opening statement in physical form, RP shall send the statement in physical form through post.

- Client account number generated through RPM (RP) shall be referenced by the client for all its transactions in the repository system.

- The client is expected to sign a standard contract with repository participant. The format of which shall be prepared by repository and approved by WDRA.

Process 2: Warehouses acting as limited purpose agent of RP

- In case the Warehouse / WSP is not a RP, it can tie up with one or multiple RPs to facilitate account opening as a limited purpose RP (LPRP) for the depositor.

- When Depositor visits warehouse to deposit goods and he wants to open a new account, LPRP shall capture depositor information including all supporting documents in the system

- LPRP shall send depositor information to relevant RP online. Any physical document collected will be sent to RP via secured means. RP will do the verification of depositor information.

- Account for the depositor could be opened by LPRP on behalf of a RP only in following two cases:
  - Biometric based verification of AADHAR using biometric readers installed at WSP premise.
  - If biometric based verification of AADHAR is not available, WSP shall do OTP based verification of AADHAR. In case of OTP based verification of AADHAR, RP shall need to do the in person verification of person through AADHAR. RP's authorized

personnel can conduct in person verification of the depositor also through the warehouse installed web-camera.

- In case of non-availability of AADHAR biometric verification devices or web-camera for in person verification, WSP can only collect information on behalf of RP and submit request for account opening. The depositor will be required to visit RP physically for in person verification before account could be made operational.
- After successful verification, RP will open an account for the depositor in repository system.
- Till the account is approved and made operational by RP, the status of the Account will be locked. At the same time, the status of eNWR will be also locked till account will be activated. Once the account is activated, status of eNWR will become active in repository system and same will be communicated to depositor through electronic communication channel (such as SMS).

1.1.3.1. KYD for Account holders

Repository participant is responsible for doing the KYD for individual and non-individual entities (Company, Partnership, Trust and Society). Below is the list of supporting documents (Identity and address proof) that entity needs to be provided along with the application form. Repository participant, after validating the application form and supporting documents enters data into the RPM (RP) and activate the client account.

1.1.3.1.1. Supporting documents required for KYD process

Type of Depositor	Supporting documents for Depositor

Individual	a) AADHAR for biometric based or OTP based authentication
	 b) If AADHAR is not available, then
	 Any of the following proof of identity along with in-person verification at RP location:
	      a. Income Tax PAN Card with photograph
	      b. Passport
	      c. Driving license
	      d. Voter's ID Card
	
	 Any of the following as address proof
	      I. Passport
	      II. Driving license
	      III. Voters' ID card
	      IV. Electricity bill not older than 3 months
	      V. Landline Telephone bill not older than 3 months

Company	a) PAN Card b) Document showing registered address of the company. c) AADHAR of authorized signatory. If AADHAR not available, any of the above proof of identity and address as mentioned above d) Memorandum of Association.

Type of Depositor	Supporting documents for Depositor
	e) Certificate of incorporation.
Partnership	a) PAN Card b) Document showing registered address of the partnership. c) AADHAR of authorized signatory If AADHAR not available, any of the above proof of identity and address as mentioned above d) Registered partnership deed.
Trust	a) PAN Card b) Document showing registered address of the trust. c) AADHAR of authorized signatory If AADHAR not available, any of the above proof of identity and address as mentioned above d) Registered trust deed.
Society	a) PAN Card (if available) b) Document showing the registered address of the society. c) AADHAR of authorized signatory If AADHAR not available, any of the above proof of identity and address as mentioned above d) Memorandum of Association.

Table 1: Supporting documents required for depositor

1.1.4. Creation and storage of eNWR

IT Infrastructure available at various warehouses are different. Warehouses can be categorized into three types based on their IT infrastructure.

Large warehouses with sophisticated IT infrastructure

These warehouses have sophisticated IT Infrastructure (e.g. advanced warehouse management systems for automating warehouse operations), skilled staff and continuous Internet connectivity, etc. These warehouses will need to enable issuance of eNWRs by enhancing their warehouse management systems.

Small or medium warehouses with limited IT infrastructure

These warehouses may or may not be having continuous Internet connectivity which make them suitable for using a shared system for creation & issuance of eNWRs. Such warehouses will use the warehouse module through the repository portal for creation of eNWR in repository. Such software will also work in offline mode in case of intermittent connectivity and synchronize with the repository when online.

1.1.4.1. Creation of eNWR by initiating request through RP

Process overview:

Below steps are followed only if the depositor does not have any account with repository and therefore needs to open an account in repository system to deposit goods. This is a onetime activity**.**

- In case, where warehouses act as limited purpose agent of RP, depositor can open its account in repository system when he visits warehouse to deposit goods, and follow the procedure as mentioned in Section 1.1.3 Process 2.
- If warehouses are not acting as limited purpose agent of RP, depositor must open its account in repository system through RP by following the procedure mentioned in Section 1.1.3 Process 1.

Below steps are to be followed if the depositor account already exists in repository system and initiates deposit of goods through the RP.

The process suggested below is complex in nature as against the convenience offered where depositor directly deposits the goods in the warehouse without having to visit the RP. However, the risk in this process is minimal as there exists maker-checker functionality while in the other process, everything with respect to creation of eNWR is carried out by the warehouse

Process Overview

- Depositor submits a request for deposit of goods to its RP.
- After verification of request, RP creates an electronic request and forwards the same to Repository. Repository generates an authorization code online and send it to the depositor/client. Confirmation of the transaction is intimated to the depositor through e-mail and SMS as well.
- Repository transmits online the request to WSP/Warehouseman.
- Depositor or authorised representative of depositor visits warehouse to deposit the goods.
- If depositor sends its authorized representative to deposit goods, depositor needs to share the authorization code received from the repository with the authorized representative. WSP does the KYD validation of depositor or of the authorized representative in case depositor sends a representative to deposit goods.
- On verification, WSP/ Warehouseman accepts goods and capture all information related to goods in the WSP system.
- WSP/Warehouseman sends sample of goods to assayer for grading of goods.
- Assayer submits the grading information in warehouse system that needs to be confirmed by WSP/Warehouseman.
- WSP/Warehouseman enters data to create eNWR.

- Validation will be performed at warehouse end to maintain the integrity of data before sending it to repository either by directly using online Repository System or using an online application programming interface (API).
- WSP/Warehouseman system generates a unique eNWR number and upload the information to the repository through its system.
- Based on the information received from the WSP, the repository updates its records.
- RP account, WSP/Warehouseman account and Depositor account are updated with the new record details.
- Repository intimates depositor and WSP/Warehouseman through electronic communication channel (such as email and SMS) about the creation of eNWR.
- WSP provides a print copy of eNWR receipt to depositor or AR of the depositor (in case depositor sends AR to deposit goods in warehouse).

Process in Detail:

1. **Step 1: Deposit of goods by Depositor**
   a. Depositor shall fill up the deposit of goods form and send it to the repository participant via
      i. Client Management Portal on RP System OR
      ii. Client Management Mobile Application OR
      iii. Prescribed paper form.
   b. Request shall contain at least following information:
      i. Depositor Account No, Warehouse Registration No, Commodity Code & Quality, Unit of Measure, Quantity, Number of Packages or Bags

2. **Step 2: Intimation to Repository about deposit of goods**
   a. Upon receipt of duly filled deposit of goods request from depositor, repository participant of the depositor shall verify and approve the request.
   b. Repository participant of depositor shall send goods deposit request to repository electronically:
      i. either by accessing Repository System online
      ii. Or by using its own RP System that connects Repository System via API published by Repository.
   c. Request shall contain at least following information:
      i. Depositor Account No, Warehouse Registration No, Commodity Code & Quality, Unit of Measure, Quantity, Number of Packages or Bags
   d. If application is received in prescribed paper form, Repository participant shall maintain the scanned copy of documents provided by depositor and archive the paper application in secured location.

3. **Step 3: Intimation to Depositor by Repository**

   a. Repository shall generate a unique authorization code for the request and shares it with depositor by sending SMS. Depositor shall need to share this code if in case it sends his authorised representative to deposit the goods. This shall be required for verification of depositor or his authorised representative by WSP, at the time of accepting the goods.

4. **Step 4: Intimation to WSP about deposit of goods**

   a. Repository, upon receiving request from the RP, shall forward the deposit of goods request to WSP.

   b. WSP shall be informed through electronic communication channel (such as SMS) about the request.

   c. Request shall contain at least following information:

      i. Depositor Account No, Warehouse Registration No, Commodity Code, Unit of Measure, Quantity, Number of Packages or Bags

5. **Step 5: Visit to Warehouse for deposit of goods**

   a. Depositor / Depositor authorised person shall visit warehouse to submit goods.

   b. Warehouse shall issue gate pass to depositor / depositor authorised person.

   c. Warehouse shall need to capture all necessary information relating to the goods in the system based on the deposit of goods made by the depository or his authorised person. This will be required to reconcile the physical stocks lying at the warehouse with the data maintained in repository for the warehouse.

   d. Depositor shall carry KYD document (AADHAR card) with him.

   e. In case, depositor sends somebody else to deposit goods on his behalf, that person shall need to carry KYD document (AADHAR card) of him as well as account opening statement of depositor.

6. **Step 6: KYD validation of Depositor by WSP**

   Case-1: Deposit of goods by Depositor himself

   a. If depositor himself deposits goods, WSP shall input AADHAR ID of depositor in its system. The WSP system will send an OTP to the registered mobile no of the depositor. Depositor shall share the OTP received in his mobile with WSP. System shall submit the input (AADHAAR ID along with OTP and other details) to UIDAI's Central Identities Data Repository (CIDR) for verification. The CIDR shall verify whether the data submitted matches with the data available in CIDR and sends a response of "Yes/No".

b. Alternatively, WSP can do online biometric based AADHAR verification instead of OTP based verification of AADHAR provided WSP has fingerprint scanner in warehouse. Based on the fingerprints of the depositor, UIDAI's Central Identities Data Repository (CIDR) shall verify whether the data submitted matches with the data available in CIDR and sends a response of "Yes/No".

c. Depositor shall need to share Depositor Account opening statement. WSP shall check the correctness of the information by checking the request submitted by depositor to repository. WSP shall keep a copy of the AADHAR card of the depositor

    i. Either scanning the AADHAR card of depositor.

    ii. Or storing the hard copy of AADHAR card.

Exception handling:

Warehouses having intermittent internet connectivity shall need to collect hard copy of AADHAR card and account opening statement of the depositor. These warehouses may be having continuous or limited internet connectivity which makes them suitable for the following:

- Option 1: Using application software provided & hosted by the repository.
- Option 2: Using a mobile application provided by the repository, i.e. a mobile version of the Warehouse module in the repository application. Mobile applications can work over low-bandwidth internet connectivity such as GPRS.

    WSP system shall generate a unique eNWR on repository system based on the data (depositor information, warehouse information, commodity information). ENWR number shall be communicated to depositor.

Case-2: Deposit of goods by Depositor Authorised representative.

a. If depositor sends his authorised representative to deposit goods on his behalf, that person shall need to share the authorization code received by depositor at the time of raising goods deposit request.

b. WSP shall input AADHAR ID of authorised representative (depositing goods on behalf of depositor). System shall send an OTP to the registered mobile no of the authorised representative. Authorised representative shall share OTP received in his mobile with WSP. WSP system shall submit the information (AADHAAR ID along with OTP and other details) to UIDAI's Central Identities Data Repository (CIDR) for verification. The CIDR shall verify whether the data submitted matches the data available in CIDR and sends a response of "Yes/No".

c. Authorised representative depositing goods on behalf of depositor shall need to share Depositor Account opening statement with WSP. WSP shall check the correctness of the information against the request submitted by depositor. WSP shall keep a copy

of AADHAR cards of the depositor and the authorised representative depositing the goods on behalf of depositor

     i. Either scanning AADHAR card of depositor and the AADHAR card of person selected by depositor

     ii. Or storing the hard copy of AADHAR cards.

Exception handling:

Warehouses having intermittent internet connectivity shall need to collect hard copy of AADHAR card and account opening statement of the depositor. Warehouses shall need to collect hard copy of AADHAR card of the person (submitting goods on behalf of depositor) before accepting the goods. The person (submitting goods on behalf of depositor) shall need to share the unique authorization code (received by depositor at the time of raising a submission of good request to repository) with WSP.

These warehouses can use either of the below 2 options to create and store eNWR.

- Option 1: Using application software provided & hosted by the repository.
- Option 2: Using a mobile application provided by the repository, i.e. a mobile version of the Warehouse module in the repository application. Mobile applications can work over low-bandwidth internet connectivity such as GPRS.

WSP system shall generate a unique eNWR on repository system based on the data (depositor information, warehouse information, commodity information). eNWR number shall be communicated to depositor.

7. **Step 7: Assessment, grading and acceptance of goods**
   a. WSP shall use weighbridge to weigh the goods. Warehouse can have its own weighbridge or can use external certified weighbridge located outside the warehouse.
   b. For assessment and grading of goods, WSP shall approach authorised assayers. WSP shall need to collect sample of goods and need to send it to assayer. Assayers will access warehouse system to provide input on grading which has to be confirmed by warehouses in the same system.
   c. WSP shall check the Agmark portal to determine the market price of the goods on that particular day.
   d. Warehouse may arrange to have assayer onsite for timely support for goods already brought to the warehouse
   e. In case Assayer is not available onsite at the time of bringing the goods, the depositor can be given a temporary receipt. The actual grade can be updated on the system later and intimation can be sent to depositor. This can avoid multiple movement of goods by the depositor

8. **Step 8: Entry of data for creation of eNWR and validation of data at warehouse end**

   a. WSP shall need to enter data for creation of eNWR. WSP can enter data

      i. Either in own Warehouse system that connects to the Repository system via API published by Repository.

      ii. Or using the software provided by repository that connects to Repository system via web.

   b. WSP shall need to enter at least below fields for creation of eNWR.

      i. Depositor Account No

      ii. Warehouse Registration No

      iii. Commodity Code

      iv. Unit of Measure

      v. Quantity

      vi. Number of Packages or Bags

      vii. Estimated Value at deposit

      viii. Lot Number

      ix. Private Marks

      x. Storage Charges

      xi. Handling Charges

      xii. Insurance Policy No

      xiii. Storage Date From

      xiv. Storage Date To

      xv. Validity

      xvi. Negotiable receipt

      xvii. Advance amount to warehouseman

      xviii. Declared shelf-life of goods

      xix. Validity

   c. Validation against field shall be performed at warehouse end to maintain the integrity of data before sending it to repository using an online application programming interface (API).

   d. WSP system shall populate the below fields of eNWR record.

      i. Depositor Name

      ii. Warehouse Receipt No

      iii. Receipt date

      iv. Depositor Address

      v. Warehouse Registration Validity

      vi. Warehouse Name

      vii. Warehouse Address

        viii.   Warehouse Location

        ix.   Insured for Fire/ Floods/ Theft/ Burglary/ Misappropriation/ Riots/ Strikes/ Terrorism

        x.   Insurance Company Name

        xi.   Insurance Coverage Amount

        xii.   Insurance Validity From

        xiii.   Insurance Validity To

        xiv.   Type

        xv.   Status

        xvi.   Created by

        xvii.   Creation Date

e. System used by WSP shall generate a unique eNWR number which shall be sent to repository system.

9. Step 9: Storing of record by Repository

a. Repository shall store the record in its system with the above details.

10. Step 10: Intimation to different stakeholders

a. Repository shall intimate the RP, depositor and WSP regarding creation of eNWR.

b. RP system, depositor and WSP account shall be updated with new eNWR.

c. Depositor and WSP shall be informed through electronic communication channel (such as SMS) about the execution of creation of eNWR request.

d. WSP provides a print copy of eNWR receipt to depositor or AR of the depositor (in case depositor sends AR to deposit goods in warehouse), as per WDR Act, 2007 and in the prescribed format.

1.1.4.2. Creation of eNWR by initiating request through Warehouse/WSP

The process suggested below is rather simple in nature as the need for the depositor to visit RP to deposit goods in the warehouse has been done away with, but risk is more as compared to the process described earlier. This process has been suggested only keeping convenience of farmers and WDRA, may, in times to come, incorporate changes in this process to make it less risky.

Process overview:

Depositor himself comes to deposit goods in warehouse

- Depositor visits warehouse to deposit the goods.
- Depositor shall fill up the deposit of goods form and submit it to the warehouse.

- Depositor needs to provide KYD document (AADHAR card) and account opening statement to WSP/ Warehouseman.
- WSP shall use weighbridge to weigh the goods. Warehouse can have its own weighbridge or can use external certified weighbridge located outside the warehouse.
- WSP accepts goods in the warehouse and submits 'Deposit of Goods' form electronically in WSP system or in repository provided warehouse module and sends request to repository.
- WSP/Warehouseman sends sample of goods to assayer for grading of goods.
- Repository validates depositor information and on successful validation, sends an OTP containing information about the commodity and the quantity to the depositor. Repository also sends the KYD and account information of depositor to WSP.
- Assayer submits the grading information in warehouse system that needs to be confirmed by WSP/Warehouseman.
- WSP enters the quality and price information of the commodity in WSP system or in repository provided warehouse module.
- WSP enters OTP shared by depositor in WSP system or in repository provided warehouse module to confirm 'Deposit of Goods 'request.
- Validation will be performed at warehouse end to maintain the integrity of data before sending it to repository either by directly using online Repository System or using an online application programming interface (API).
- WSP/Warehouseman system generates a unique eNWR number and upload the information to the repository through its system.
- Based on the information received from the WSP, the repository stores the information its records.
- RP account, WSP/Warehouseman account and Depositor account are updated with the new record details.
- Repository intimates depositor, RP and WSP/Warehouseman through electronic communication channel (such as email and SMS) about the creation of eNWR.
- WSP provides a print copy of eNWR receipt to depositor or AR of the depositor(in case depositor sends AR to deposit goods in warehouse), as per WDR Act, 2007 and in the prescribed format..

Depositor sends authorised representative to deposit goods in warehouse

- Depositor shall fill up the deposit of goods form and submit it to the warehouse through Authorised Representative (AR).
- AR of depositor visits warehouse to deposit the goods. AR of depositor needs to provide KYD document (AADHAR card) and account opening statement of depositor as well as his own KYD document to WSP/ Warehouseman.

- WSP shall use weighbridge to weigh the goods. Warehouse can have its own weighbridge or can use external certified weighbridge located outside the warehouse.
- WSP accepts goods in the warehouse and submits 'Deposit of Goods' form electronically in WSP system or in repository provided warehouse module and sends request to repository.
- WSP/Warehouseman sends sample of goods to assayer for grading of goods.
- Repository validates depositor information and on successful validation, sends an OTP to containing information about the commodity and the quantity to the depositor. Repository also sends the KYD and account information of depositor to WSP.
- Depositor needs to share OTP with AR who in turn will share it with WSP.
- Assayer submits the grading information in warehouse system that needs to be confirmed by WSP/Warehouseman.
- WSP enters the quality and price information of the commodity in WSP system or in repository provided warehouse module.
- WSP enters OTP in WSP system or in repository provided warehouse module to confirm 'Deposit of Goods 'request.
- Validation will be performed at warehouse end to maintain the integrity of data before sending it to repository either by directly using online Repository System or using an online application programming interface (API).
- WSP/Warehouseman system generates a unique eNWR number and upload the information to the repository through its system.
- Based on the information received from the WSP, the repository stores the information its records.
- RP account, WSP/Warehouseman account and Depositor account are updated with the new record details.
- Repository intimates depositor, RP and WSP/Warehouseman through electronic communication channel (such as email and SMS) about the creation of eNWR.
- WSP provides a print copy of eNWR receipt to AR of the depositor.

Process in Detail:

1. **Step 1: Visit to Warehouse for deposit of goods**
   a. Depositor / Depositor authorised person shall visit warehouse to submit goods.
   b. Warehouse shall need to capture all necessary information relating to the goods in the system based on the deposit of goods made and the request for deposit of goods submitted by the depositor himself or through his authorised person.
   c. Depositor shall carry KYD document (AADHAR card) and account opening statement with him.

d. In case, depositor sends its authorised representative to deposit goods on his behalf, that person shall need to carry
    i. AADHAR card of depositor
    ii. AADHAR card of depositor authorised representative
    iii. Account opening statement of depositor

2. **Step 2: Intimation to Repository about deposit of goods**
    a. WSP shall use weighbridge to weigh the goods. Warehouse can have its own weighbridge or can use external certified weighbridge located outside the warehouse.
    b. WSP shall fill up the 'Deposit of Goods' form electronically and send it to the repository via
        i. Either in own Warehouse system that connects to the Repository system via API published by Repository.
        ii. Or using the software provided by repository that connects to Repository system via web.
    c. WSP shall need to enter at least below fields in 'Deposit of Goods' form.
        i. Depositor Account No
        ii. RP ID
        iii. Warehouse Registration No
        iv. Commodity Code & Quality
        v. Unit of Measure
        vi. Quantity
        vii. Number of Packages or Bags
        viii. Lot Number

3. **Step 3: Sending sample of goods to Assayer for determination of grading of goods**
    a. For assessment and grading of goods, WSP shall approach authorised assayers. WSP shall need to collect sample of goods and need to send it to assayer.
    b. Warehouse may arrange to have assayer onsite for timely support for goods already brought to the warehouse

4. **Step 4: Validation of Depositor information by Repository**
    a. Repository shall check depositor information stored in repository.
    b. On successful validation of information, repository shall send an OTP containing information about the commodity and the quantity to depositor.
    c. Depositor shall need to share OTP received from repository with WSP.
    d. In case, depositor sends authorised representative to deposit goods, depositor shall need to share OTP with authorised representative who in turn will share it with WSP.

e. Repository shall send depositor information (KYD and depositor account information) to WSP.

5. **Step 5: Assessment of grading of commodity by Assayer**
   a. Assayers will access warehouse system to provide input on grading which has to be confirmed by warehouses in the same system.
   b. In case Assayer is not available onsite at the time of bringing the goods, the depositor can be given a temporary receipt. The actual grade can be updated on the system later and intimation can be sent to depositor. This can avoid multiple movement of goods by the depositor.

6. **Step 6: Entry of data for creation of eNWR and confirmation of Deposit of Goods request**
   a. WSP shall need to enter data for creation of eNWR. WSP can enter data
      i. Either in own Warehouse system that connects to the Repository system via API published by Repository.
      ii. Or using the software provided by repository that connects to Repository system via web.

   b. WSP shall check the Agmark portal to determine the market price of the goods on that particular day.
   c. WSP shall need to enter at least below fields for creation of eNWR.
      i. Depositor Account No
      ii. RP Id
      iii. Warehouse Registration No
      iv. Commodity Code & Quality
      v. Unit of Measure
      vi. Quantity
      vii. Number of Packages or Bags
      viii. Estimated Value at deposit
      ix. Lot Number
      x. Private Marks
      xi. Storage Charges
      xii. Handling Charges
      xiii. Insurance Policy No
      xiv. Storage Date From
      xv. Storage Date To
      xvi. Validity

xvii. Negotiable receipt

xviii. Advance amount to warehouseman

xix. Declared shelf-life of goods

xx. Validity

d. Validation against field shall be performed at warehouse end to maintain the integrity of data before sending it to repository using an online application programming interface (API).

e. WSP system shall populate the below fields of eNWR record.

i. Depositor Name

ii. RP Id

iii. Warehouse Receipt No

iv. Receipt date

v. Depositor Address

vi. Warehouse Registration Validity

vii. Warehouse Name

viii. Warehouse Address

ix. Warehouse Location

x. Insured for Fire/ Floods/ Theft/ Burglary/ Misappropriation/ Riots/ Strikes/ Terrorism

xi. Insurance Company Name

xii. Insurance Coverage Amount

xiii. Insurance Validity From

xiv. Insurance Validity To

xv. Type

xvi. Status

xvii. Created by

xviii. Creation Date

f. System used by WSP shall generate a unique eNWR number which shall be sent to repository system.

g. WSP shall enter the OTP to confirm 'Deposit of Goods' request.

7. Step 7: Storing of record by Repository

a. Repository shall store the record in its system with the above details.

8. Step 8: Intimation to different stakeholders

a. Repository shall intimate the RP, depositor and WSP regarding creation of eNWR.

b. RP system, depositor and WSP account shall be updated with new eNWR.

c. Depositor and WSP shall be informed through electronic communication channel (such as SMS) about the execution of creation of eNWR request.

d. WSP shall give a print copy of eNWR receipt to depositor. In case depositor sends authorised representative to deposit goods, WSP shall give a print copy of eNWR receipt to authorised representative of depositor, as per WDR Act, 2007 and in the prescribed format

1.1.5. Printing of eNWR

- This process is common for both the above processes as contained in Section 1.1.4
- WSP shall enter information related to Depositor, Warehouse and Commodity in its system in order to create eNWR. eNWR record will be stored on Repository. Repository shall intimate WSP, Depositor about the creation of eNWR through electronic communication channel (SMS). WSP, RP and Depositor account with the new eNWR details.
- After WSP has approved creation of eNWR in the repository system and the repository has duly record the same on its records, WSP shall generate a physical print of the eNWR and provide it to depositor as a proof of deposit of goods in warehouse. The document shall contain all information about eNWR that are prescribed by WDRA
- The print of eNWR will contain a link to the URL where the terms and conditions of eNWR as per the Acts, Rules, Regulations and Guidelines are available and can be read by the holder.

1.1.6. Conversion of NWR or WR to e-NWR

Process overview:

- Depositor needs to have an account in repository system. This can be achieved either following the Process 1 (through RP, in case where warehouse is not eligible to act as limited purpose agent of RP or depositor finds it convenient to open the account with RP) / Process 2 (warehouse is eligible to act as limited purpose agent of RP) mentioned under Section 1.1.3 Opening of Client Account.
- Depositor needs to carry the WR / NWR receipt to RP and fill the WR/NWR conversion request form.
- RP will verify the WR / NWR details and deface the physical receipt and create an electronic eNWR conversion request and send it to the repository.
- Depositor will visit the WSP and submit its request for conversion of WR / NWR to eNWR and request the WSP to get the goods re-assayed, in terms of quality and quantity.
- WSP will verify the depositor either through:
  - Biometric verification using AADHAR
  - OTP based matching of depositor using mobile number registered during AADHAR enrolment

- WSP will receive the electronic request through the repository system and get the confirmation from the assayer about the quality and quantity before confirming the request for conversion of WR/NWR to eNWRs, as per the detailed procedure mentioned in step 8 of Section 1.1.4 Creation and storage of eNWR.

- Upon confirmation of the conversion request, WSP/Warehouseman system generates a unique eNWR number which is updated in the repository system.

- RP account, WSP/Warehouseman account and Depositor account are updated with the new record details.

- Repository intimates depositor and WSP/Warehouseman through electronic communication channel (such as email and SMS) about the creation of eNWR for the existing NWR.

- Existing WR/NWR receipt needs to be maintained for audit purposes, as per the record keeping requirements.

1.1.7. Withdrawal of Commodity

If the holder of the eNWR wishes to take delivery of the goods, he needs to clear the lien, if any on the goods and also need to clear all dues to the warehouse.

Process overview:

Depositor/Holder himself comes to collect goods in warehouse

- Depositor/Holder visits warehouse to collect the goods.

- Depositor/Holder needs to provide KYD document (AADHAR card) and account opening statement to WSP/ Warehouseman.

- WSP checks ownership of eNWR before submitting 'Withdrawal of Commodity' request.

- WSP submits 'Withdrawal of Commodity' request electronically in WSP system or in repository provided warehouse module and sends request to repository.

- Repository validates depositor/holder information and on successful validation, sends an OTP containing information about the commodity and the quantity to the depositor/holder. Repository also sends the KYD and account information of depositor/holder, to WSP.

- WSP does online biometric based authentication of AADHAR of depositor/Holder or OTP based authentication of AADHAR along with in person verification.

- WSP enters OTP shared by depositor/holder in WSP system or in repository provided warehouse module to confirm 'Withdrawal of Commodity 'request.

- Validation will be performed at warehouse end to maintain the integrity of data before sending it to repository either by directly using online Repository System or using an online application programming interface (API).

- Depositor/Holder needs to clear dues of WSP. WSP releases goods and depositor/holder collects goods from warehouse.

- RP account, WSP account and Depositor/holder account are updated with the debit instruction.
- Repository intimates depositor and WSP through electronic communication channel (such as SMS) about the delivery of eNWR.
- WSP provides a print copy of eNWR, reflecting the updated quantity of commodity after delivery of goods to depositor/holder.

Depositor/Holder sends authorised representative to collect goods in warehouse

- Authorised representative (AR) of depositor/holder visits warehouse to collect the goods.
- AR of depositor/holder needs to provide KYD document (AADHAR card) and account opening statement of depositor/holder as well as his own KYD document to WSP/ Warehouseman.
- WSP checks ownership of eNWR before submitting 'Withdrawal of Commodity' request.
- WSP submits 'Withdrawal of Commodity' request electronically in WSP system or in repository provided warehouse module and sends request to repository.
- Repository validates depositor/holder information and on successful validation, sends an OTP containing information about the commodity and the quantity to the depositor/holder. Repository also sends the KYD and account information of depositor/holder to WSP.
- Depositor/Holder needs to share the OTP received from repository with its AR.
- WSP does online biometric based authentication of AADHAR of AR of depositor/holder or OTP based authentication of AADHAR of AR of depositor/holder along with in person verification.
- WSP enters OTP provided by AR of depositor/holder in WSP system or in repository provided warehouse module to confirm 'Withdrawal of Commodity 'request.
- Validation will be performed at warehouse end to maintain the integrity of data before sending it to repository either by directly using online Repository System or using an online application programming interface (API).
- AR of depositor/holder needs to clear dues of WSP. WSP releases goods and AR of depositor/holder collects goods from warehouse.
- Depositor/holder account get debited for goods that are removed from the warehouse.
- RP account, WSP account and Depositor/Holder account are updated with the debit instruction.
- Repository intimates depositor/holder and WSP through electronic communication channel (such as SMS) about the delivery of eNWR.
- WSP provides a print copy of eNWR, reflecting the updated quantity of commodity after delivery of goods to AR of depositor/holder who in turn handovers it to the depositor/holder

Process in Detail:

1. **Step 1: Visit to Warehouse for withdrawal of goods**
   a. Depositor/Holder or their respective authorised person shall visit warehouse to collect goods.
   b. Depositor/Holder shall carry KYD document (AADHAR card) and account opening statement with him.
   c. In case, depositor/holder sends its authorised representative to collect goods on his behalf, that person shall need to carry
      i. AADHAR card of depositor/holder
      ii. AADHAR card of depositor/holder authorised representative
      iii. Account opening statement of depositor/holder

2. **Step 2: Intimation to Repository about withdrawal of goods**
   a. WSP shall check the ownership of eNWR in system.
   b. WSP shall fill up the 'Withdrawal of commodity ' form electronically and send it to the repository via
      i. Either in own Warehouse system that connects to the Repository system via API published by Repository.
      ii. Or using the software provided by repository that connects to Repository system via web.
   c. WSP shall need to enter at least below fields in 'Withdrawal of Commodity' form
      i. Depositor Account No
      ii. Warehouse Receipt no
      iii. RP ID
      iv. Warehouse Registration No
      v. Commodity Code & Quality
      vi. Unit of Measure
      vii. Quantity
      viii. Number of Packages or Bags
      ix. Lot Number
      x. Instructions for delivery

3. **Step 3: Validation of Depositor information by Repository**
   a. Repository shall check depositor/holder information stored in repository.
   b. On successful validation of information, repository shall send an OTP containing information about the commodity and the quantity to depositor/holder.
   c. Depositor/Holder shall need to share OTP received from repository with WSP.

d. In case, depositor/holder sends authorised representative to deposit goods, depositor/holder shall need to share OTP with authorised representative who in turn will share it with WSP.

e. Repository shall send depositor/holder information (KYD and depositor account information) to WSP.

4. **Step 4: KYD validation of Depositor/Holder by WSP**
   Case-1: Collection of goods by Depositor/Holder himself
   a. If depositor/holder himself comes to collect goods, WSP shall input AADHAR ID of depositor/holder in its system. System shall send an OTP to the registered mobile no of the depositor/holder. Depositor/Holder shall share OTP received in his mobile with WSP. System shall submit the input (AADHAAR ID along with OTP and other details) to UIDAI's Central Identities Data Repository (CIDR) for verification. The CIDR shall verify whether the data submitted matches the data available in CIDR and sends a response of "Yes/No".

   b. Alternatively, WSP can do online biometric based AADHAR verification instead of OTP based verification of AADHAR provided WSP has fingerprint scanner in warehouse. Based on the fingerprints of the depositor, UIDAI's Central Identities Data Repository (CIDR) shall verify whether the data submitted matches with the data available in CIDR and sends a response of "Yes/No".

   c. Depositor/Holder shall need to share Depositor Account No. with WSP. WSP shall use system to check the owner of the eNWR before releasing goods.

   d. WSP shall keep a copy of the AADHAR card of the depositor
      xi. Either scanning the AADHAR card of depositor/holder
      xii. Or storing the hard copy of AADHAR card of depositor/holder

Exception handling:

Warehouses having intermittent internet connectivity shall need to collect hard copy of AADHAR card and account opening statement of the depositor/holder.

Warehouses can use either of the below 2 options to check the owner of eNWR before releasing goods and modify the attributes of eNWR post-delivery of goods.

- Option 1: Using application software provided & hosted by the repository.
- Option 2: Using a mobile application provided by the repository, i.e. a mobile version of the Warehouse module in the repository application. Mobile applications can work over low-bandwidth internet connectivity such as GPRS.

Case-2: Collection of goods by authorised representative of the depositor/holder.

    a. If depositor/holder sends somebody to collect goods on his behalf, that person shall need to share the authorization code (received by depositor/holder at the time of raising delivery of goods request) with WSP.

    b. Person (collecting goods on behalf of depositor/holder) shall share AADHAR id of depositor/holder with WSP. WSP shall check in system and shall verify the information in the system against the information captured in AADHAR card of depositor/holder.

    c. WSP shall input AADHAR ID of person (collecting goods on behalf of depositor/holder). System shall send an OTP to the registered mobile number of the person (collecting goods on behalf of depositor/holder). Person shall share OTP received in his mobile with WSP. Upon entering the OTP, WSP shall be able to see the information about the person (collecting goods on behalf of depositor/holder) which shall be verified against the information captured in AADHAR card carried by person.

    d. Alternatively, WSP can do online biometric based AADHAR verification instead of OTP based verification of AADHAR provided WSP has fingerprint scanner in warehouse. Based on the fingerprints of the depositor/holder, UIDAI's Central Identities Data Repository (CIDR) shall verify whether the data submitted matches with the data available in CIDR and sends a response of "Yes/No".

    e. Person (collecting goods on behalf of depositor/holder) shall need to share Depositor Account No. with WSP. WSP shall use system to check the owner of the eNWR before releasing goods.

    f. WSP shall keep a copy of AADHAR card of the depositor/holder and AADHAR card of person (collecting goods on behalf of depositor /holder)

        i. Either scanning AADHAR card of depositor or AADHAR card of the person selected by depositor/holder.

        ii. Or storing the hard copy of AADHAR cards.

Exception handling:

Warehouses having intermittent internet connectivity shall need to collect hard copy of AADHAR card and account opening statement of the depositor/holder before releasing goods. The person (submitting goods on behalf of depositor/holder) shall need to share the unique authorization code (received by depositor/holder at the time of raising a withdrawal of commodity request to repository) with WSP.

These warehouses can use either of the below 2 options to check the owner of eNWR before releasing goods and modify the attributes of eNWR post-delivery of goods.

- Option 1: Using application software provided & hosted by the repository.
- Option 2: Using a mobile application provided by the repository, i.e. a mobile version of the Warehouse module in the repository application. Mobile applications can work over low-bandwidth internet connectivity such as GPRS.

5. **Step 5: Confirmation of request and Delivery of goods**
   a. WSP shall need to enter data for modification of quantity if there is withdrawal of partial quantity or cancellation of eNWR in case entire quantity under the eNWR has been delivered. WSP can enter data
      i. Either in own Warehouse system that connects to the Repository system via API published by Repository.
      ii. Or using the software provided by repository that connects to Repository system via web.
   b. WSP enters the OTP to confirm the request.
   c. WSP shall collect the storage and handling charges from depositor/holder or depositor/holder authorised person.
   d. WSP shall release goods.

6. **Step 6: Record update by Repository**
   a. The below is the list of tentative fields that shall be updated in old record.
      i. Status
      ii. Last update date
      iii. Last updated by
   b. The below is the indicative list of fields that shall be updated in new record.
      i. Type
      ii. Status
      iii. Created by
      iv. Creation date
      v. Instructions for Delivery
      vi. Quantity
      vii. Number of Bags or Packages
      viii. Current Estimated Value
      ix. Storage charges
      x. Handling charges
   c. Repository shall update its system as per the instruction given by WSP.

7. **Step 7: Intimation to stakeholders:**

a. Repository shall intimate repository participant, depositor/holder and WSP regarding the withdrawal of commodity.

b. RP system, Depositor/Holder and WSP Account shall be updated with new record details.

c. Depositor/Holder and WSP shall be informed through electronic communication channel (such as SMS) about the closure of withdrawal of commodity request.

d. Print copy of eNWR (with updated quantity) will be issued to depositor/holder or AR of depositor/holder (if AR visits to collect the goods)

1.1.8. Transfer of eNWR

An eNWR may have several holders during its lifetime. If original eNWR holder wants to transfer the ownership of eNWR (sell the eNWR) to some other party, the below process will be followed.

1.1.8.1. Off Market Transfer

Process Overview:

- Seller (Delivering Client) fills up the delivery of eNWR form (online/physical) and sends it to RP.

- After validating the request, RP of delivering client forwards the request electronically to repository.

- Repository intimates RP of receiving client about the initiation of transfer of eNWR request by delivering client. RP of receiving clients intimates receiving client by sending message through electronic communication channel (SMS, e-mail).

- Buyer (Receiving Client) may on his own or on the basis of intimation received from his RP fill up the receipt of eNWR form (online/physical) and send it to RP of receiving client. (Buyer can also have the option of setting up standing instruction in his account for receipt (credit) of eNWR).

- After validating the request, RP of receiving client forwards the request to repository.

- Repository makes changes in the respective accounts by debiting and crediting the quantity.

- Accounts of RP, WSP, buying and selling client are updated with new record details (same eNWR number).

- Repository intimates delivering client, receiving client and WSP through electronic communication channel (such as SMS) about the debit or credit as the case may be, of eNWR.

- In case of inter-repository off market transfer request, respective repository of buyer and seller shall effect the transfers, using Inter-Repository Protocol.

- Payment against delivery of eNWR is outside the scope of repository process and will be handled between the buying and selling clients.

Process in detail:

1. **Step 1: Submission of transfer request by Seller**
   a. The Seller shall fill up transfer request form for transfer of eNWR and submit it to its repository participant via
      i. Client Management Portal on RP System OR
      ii. Client Management Mobile Application OR
      iii. Prescribed paper form.
   b. The request shall contain at least below fields.
      i. Warehouse Receipt No, Depositor Account No (Seller ID), Transferee Account No (Buyer ID), Warehouse Registration No, Commodity Code & Quality,Unit of Measure, Number of Packages or Bags, Transfer date and Quantity.

2. **Step 2: Intimation to Repository about transfer of eNWR**
   a. Upon receipt of duly filled transfer of eNWR request from seller, repository participant of seller shall verify and approve the request
   b. Repository participant of seller shall forward transfer request to repository:
      i. either by accessing Repository System online
      ii. or using its own RP System that connects Repository System via API published by Repository
   c. Request shall contain at least following information:
      i. Warehouse Receipt No, Depositor Account No (Seller ID), Transferee Account No (Buyer ID), Warehouse Registration No, Commodity Code, Unit of Measure, Number of Packages or Bags, Transfer date and Quantity
   d. If application is received in prescribed paper form, Repository participant shall maintain the scanned copy of documents provided by seller and archive the paper application in secured location.

3. **Step 3: Intimation to RP of Buyer by Repository about initiation of transfer request**
   a. Repository shall intimate RP of buyer about the initiation of transfer request by seller.
   b. RP of buyer intimates buyer about initiation of transfer request by seller by sending message through electronic communication channel (such as e-mail, SMS).
   c. Message shall contain at least following information:
      i. Warehouse Receipt No, Depositor Account No (Seller ID), Transferee Account No (Buyer ID), Warehouse Registration No, Commodity Code & Quality, Unit of Measure, Number of Packages or Bags, Transfer date and Quantity.

ii. If in case the target client is having its account with the other repository, in addition to what is stated in (i) above, the request also should include the other repository's id.

4. **Step 4: Submission of receipt request by Buyer**
   a. Buyer can give standing instructions to his RP to receive eNWRs in his account or can fill up request form for the receipt of eNWR and shall submit it to its repository participant via
      i. Client Management Portal on RP System OR
      ii. Client Management Mobile Application OR
      iii. Prescribed paper form
   b. The request shall contain at least the below fields.
      i. Warehouse Receipt No, Depositor Account No (Seller ID), Transferee Account No (Buyer ID), Warehouse Registration No, Commodity Code & Quality, Unit of Measure, Number of Packages or Bags, Transfer date and Quantity.

5. **Step 5: Intimation to Repository about receipt request of eNWR**
   a. Upon receipt of duly filled transfer of eNWR form, repository participant of buyer shall verify and approve the request. If the account is enabled with standing instruction, RP system will automatically generate a receipt instruction.
   b. Repository participant shall transmit the request to repository:
      i. either by accessing Repository System online
      ii. or using its own RP System that connects Repository System via API published by Repository
   c. The request shall contain at least below fields.
      i. Warehouse Receipt No, Depositor Account No (Seller ID), Transferee Account No (Buyer ID), Warehouse Registration No, Commodity Code, Unit of Measure, Number of Packages or Bags, Transfer date and Quantity.
   d. If application is received in prescribed paper form, Repository participant shall maintain the scanned copy of documents provided by buyer and archive the paper application in secured location.

6. **Step 6: Transfer of eNWR**
   a. Repository, upon receiving and validating the requests from RP of buyer and seller, shall match the records.
   b. If records match, Repository shall modify the records for buyer and seller with quantity and other details.

c. If records do not match, both the transactions will fail.

d. If it is an inter-repository transfer, respective repositories, using the inter-repository protocol will book the transactions and confirm to the other repository so that it can complete the booking and amend its records.

e. Below is the indicative list of fields that shall be updated in new record.

    i. Type

    ii. Status

    iii. Commodity code & Quality

    iv. Quantity

    v. Transferee Account No

    vi. Transfer date

    vii. Created by

    viii. Creation Date

f. Below is the indicative list of fields that shall be updated by repository in the old record with same eNWR.

    i. Status

    ii. Last updated by

    iii. Last update date

7. **Step 7: Intimation to stakeholders**

a. Repository shall send a message to Buyer, Seller and WSP regarding the changes due to transfer of eNWR.

b. Respective RP Systems, Buyer's Account, Seller's Account and WSP Account will be updated with new record details.

c. Buyer, Seller and WSP shall be informed through electronic communication channel (such as SMS) about the closure of transfer request

1.1.8.2. Market Transfer

Pursuant to a trade done on a stock exchange, delivery of eNWR to or from a clearing member account is called a "Market Transfer" in the repository system. A transfer is a market transfer when either source or target in a transfer instrument is a CM account.

Process Overview:

- Seller (Delivering Client) transfers the eNWR to the clearing member of the exchange as per the procedure laid down by the respective clearing entities for transfer.
- Trades on exchange are cleared & settled by clearing house.

- The clearing house instructs respective repository for pay-in and pay-out of eNWR through the clearing module of the repository which is either developed by the clearing house to meet the specification given by the repository or provided by repository.

- Clearing members instructs its RP to transfer eNWRs to Clearing entities towards pay-in. Similarly, upon pay out, clearing members receive eNWRs from clearing entities and give instructions to RP to transfer the eNWRs to respective client (Buyer) accounts.

- RPs accounts, Clearing Members accounts, WSP account, Seller and Buyer account are updated with the new record details.

- Repositories intimate RPs, respective clearing member, Delivering Client, Receiving Client and WSP, about execution transfer of eNWR request.

- In case of inter-repository market transfer request, respective repositories, using Inter-Repository Protocol, will complete the transaction.

- The following scenarios are possible:
  a. Selling client and clearing member are in same repository – Within repository transaction
  b. Buying client and clearing member are in same repository – Within repository transaction
  c. Selling Client and Clearing Member are in different repositories – Inter-repository transaction
  d. Buying Client and Clearing Member are in different repositories – Inter-repository transaction.

Process in detail:

1. **Step 1: Submission of transfer request by Seller**
   a. The Seller fills up transfer request form for transfer of eNWR and submit it to its repository participant via
      i. Client Management Portal on RP System OR
      ii. Client Management Mobile Application OR
      iii. Prescribed paper form.
   b. The request shall contain at least below fields.
      i. Warehouse Receipt No, Commodity Code & Quality, Unit of Measure, Settlement number, Clearing Member Id, Quantity, Depositor Account No (Seller ID), Warehouse Registration No, Transfer date.
   c. The Seller can give power of attorney as per the procedure laid down by repositories, to effect transfer of eNWR.
   d. If seller and Clearing Member are having their accounts in different repositories, the transaction will result in an inter-repository instruction. Therefore, in addition to the

information mentioned b (i), the instruction must contain other repository information as well.

2. **Step 2: Intimation to the clearing member of the Exchange about transfer of eNWR by RP of Seller**

   a. Upon receipt of duly filled transfer of eNWR request from seller, repository participant of seller shall verify and approve the request

   b. Repository participant of seller shall electronically transmit the transfer request to the clearing member of the exchange. If information submitted are not correct, the request will not be accepted, unless rectified.

   c. Request shall contain at least following information:

      i. Warehouse Receipt No, Commodity Code & Quality, Unit of Measure, Settlement number, Clearing Member Id, Quantity, Depositor Account No (Seller ID), Warehouse Registration No, Transfer date.

      ii. If all particulars are correct, the repository will validate the request and credit the eNWRs to respective clearing members' accounts. If the instruction is an inter-repository instruction, the repository shall send the instruction to the other repository using the inter-repository protocol. Based on the confirmation received from the other repository regarding credit of eNWR to clearing member's account, repository shall inform the client.

   d. If application is received in prescribed paper form, Repository participant shall maintain the scanned copy of documents provided by seller and archive the paper application in secured location.

   e. Clearing members will be able to view their accounts to verify whether eNWRs have been received in their accounts under the respective settlement accounts and can serve the purpose of following up with clients who have not effected the transfer before the deadline fixed for settlement of trades.

3. **Step 3: Submission of receipt request by Buyer**

   a. The Buyer can give standing instructions for receiving eNWRs, as a result of pay-out from the clearing member.

   b. Alternatively, Buyer can fill up a request form for the receipt of commodity and submit it to its repository participant via

      i. Client Management Portal on. RP System OR

      ii. Client Management Mobile Application OR

      iii. Prescribed paper form

   c. The request shall contain at least the below fields.

i. Warehouse Receipt No, Commodity Code & Quality, Unit of Measure, Settlement number, Clearing Member Id, Quantity, Transferee Account No (Buyer ID), Warehouse Registration No, Transfer date.

4. **Step 4: Intimation to the clearing member of the Exchange about receipt of commodity request by RP of Buyer**

   a. Upon receipt of duly filled receipt form from buyer, repository participant of buyer shall verify and approve the request. If the account is enabled with standing instruction, RP system will automatically generate a receipt instruction with all requisite information including repository id for inter-repository transactions.

   b. Repository participant of buyer shall electronically transmit the receipt request to the clearing member of the exchange. If information submitted are not correct, the request will not be accepted, unless rectified.

   c. The request shall contain at least the below fields.

      ii. Warehouse Receipt No, Commodity Code & Quality, Unit of Measure, Settlement number, Clearing Member Id, Quantity, Transferee Account No (Buyer ID), Warehouse Registration No, Transfer date.

   d. If application is received in prescribed paper form, Repository participant shall maintain the scanned copy of documents provided by seller and archive the paper application in secured location.

5. **Step 5: Actions taken by Exchanges and Clearing house**

   a. Exchange shall match Buy/Sell orders and inform respective clearing members of their settlement obligations for them to complete the pay-in and pay-out.

   b. Trades on exchange shall be cleared and settled by clearing house.

   c. Clearing house shall instruct respective repositories of the pay in obligations based on clearing member's preference of the repository.

   d. At the exchange prescribed pay-in time, eNWRs will be transferred from clearing members' accounts to the clearing house's account.

   e. After the pay-in of funds and eNWRs are received by the clearing house, it shall complete the pay-out by crediting eNWRs to each of the clearing member's account.

   f. Clearing house shall instruct clearing banks for pay-in and pay-out of funds in respect of eNWRs, which is outside the repository system.

6. **Step 6: Transfer of eNWR**

   a. Repository, upon receiving and validating the requests from clearing house, shall credit the clearing members account with eNWRs.

b. If there are instructions from clearing members to transfer eNWRs to clients (buyer's) account, if the buying client maintains account with the same repository, it shall depending on the availability of credit instruction in the system, will credit clients' account with eNWRs.

c. If the buying client maintains account with the other repository, clearing member will have to give an inter-repository instruction to the repository and it shall be the responsibility of respective repositories to complete the transfer

d. To avoid unnecessary inter-repository transactions, clearing members may have their accounts with all the repositories and inform the clearing house to credit the eNWRs after payout to the other repository from which it shall give an instruction to credit client (buyer's) account.

7. **Step 7: Intimation to stakeholders**

   a. Repository shall send a message to Buyer, Seller and WSP regarding the changes due to transfer of eNWR.

   b. RP System, Buyer Account, Seller Account and WSP Account will be updated with following with the new record details.

   c. Buyer, Seller and WSP shall be informed through electronic communication channel (such as SMS) about the closure of transfer request

1.1.9. Pledging of eNWR

Pledging is a process in which farmers get loan from the financial institution using the underlying commodity of eNWR as collateral. When a pledge is marked, the eNWR balances will remain in the client's account (borrower) only but the control on the balance will be with the financial institution. In other words, the client will not be able to use the eNWR balances until the pledge in favour of the financial institution active. Further, if the client has repaid the loan, the financial institution will release the pledge and upon such release, the balances of eNWR will be available in client's account for his use. However, if the client does not repay the loan or defaults the repayment, the financial institution will have absolute right to get the eNWR balances (ownership of eNWRs) transferred to FI's account.

Process Overview:

- The client (borrower) referred to as Pledgor (eNWR holder) approaches the pledgee (Financial Institution) to get a loan against goods represented by eNWR. Pledgor fills up the loan application form.
- Pledgee checks the completeness of form. Pledgee does KYD validation for the pledgor.
- Pledgor sends a request to repository to provide access to Pledgee to view the record of eNWR.

- Pledgee checks the owner of eNWR through repository provided portal.
- Pledgee send assayer to visit the warehouse to check the quality and quantity of commodity. If pledgee is satisfied with the estimated value of commodity with assayer verification, pledgee informs pledgor.
- Pledgor fills up the pledge creation request form (online/physical) and sends it to RP of pledgor. Pledgor can send full / partial pledge creation request to RP.
- RP of pledgor forwards the request to repository electronically.
- Repository forwards pledge creation request by pledgor to RP of pledgee.
- RP of pledgee intimates pledgee about the pending pledge creation request.
- Pledgee agrees to the pledge request by sending a pledge confirmation request to repository through repository participant of pledgee.
- Repository creates new record with Type as 'P' (Pledged) and Warehouse Module is updated.
- In case of partial pledge creation request, Repository creates a record to capture pledged quantity and another record to capture quantity which is free to be traded. RP account, WSP account, pledgor & pledgee account get updated with the new record details.
- Repository sends notification message (through SMS, E-mail) to pledgor, pledgee, and WSP once the pledge creation request is executed by repository.
- In case of inter-repository pledge creation request, the pledgor and the pledgee will submit their requests to the repository through their RP. Respective repository shall using Inter-Repository Protocol, exchange the requests and complete the booking of transactions and confirm the same to the other repository. Based on the confirmation received from the repository, records of the client, RP and WSP are modified.

Process in Detail:

1. **Step 1: Application for pledge creation of eNWR by Pledgor**
    a. Pledgor (eNWR holder) shall fill up the pledge creation form and send it to the repository participant of pledgor via
        i. Client Management Portal on RP System OR
        ii. Client Management Mobile Application OR
        iii. Prescribed paper form.
    b. Request shall contain at least following information:
        i. Warehouse Receipt No, Depositor Account No (Pledgor Identifier), Pledgee Identifier, Warehouse Registration No,), Date of Pledge, Commodity Code & Quality, Quantity to be pledged and Value of Pledge.

2. **Step 2: Intimation to Repository about creation of pledge of eNWR**

a. Upon receipt of duly filled pledge creation request from pledgor, repository participant of pledgor shall verify and approve the request. If the pledgee is with the other repository, pledge creation of eNWR request will be sent to the other repository using inter-repository protocol.

b. Repository participant of pledgor shall send pledge creation request to repository:
    i. Either by accessing Repository System online
    ii. Or by using its own RP System that connects Repository System via API published by Repository.

c. Request shall contain at least following information:
    i. Warehouse Receipt No, Depositor Account No (Pledgor Identifier), Pledgee Identifier, Warehouse Registration No,), Date of Pledge, Commodity Code & Quality, Quantity to be pledged and Value of Pledge.

d. If application is received in prescribed paper form, Repository participant shall maintain the scanned copy of documents provided by pledgor and archive the paper application in secured location.

3. **Step 3: Intimation to RP of pledgee by Repository about initiation of pledge creation request**

a. Repository shall intimate RP of pledgee about the initiation of pledge request by pledgor.

b. RP of pledgee intimates pledgee by sending message through electronic communication channel (such as e-mail, SMS).

c. If creation of pledge involves another Repository, the request for creation of pledge will be sent to the other party, using inter-repository transfer protocol.

d. Message shall contain at least following information:
    i. Warehouse Receipt No, Depositor Account No (Pledgor Identifier), Pledgee Identifier, Warehouse Registration No, Date of Pledge, Commodity Code, Quantity to be pledged and Value of Pledge, repository id.

4. **Step 4: Application for pledge creation confirmation of eNWR by Pledgee**

a. Upon receiving the message from repository, pledgee (Financial Institution) shall fill up the pledge creation confirmation form and send it to the repository participant of pledgee via
    i. Client Management Portal on RP System OR
    ii. Client Management Mobile Application OR
    iii. Prescribed paper form.

b. If creation of pledge involves another Repository, the request for creation of pledge will be sent to the other party, using inter-repository transfer protocol.

c. Request shall contain at least following information:
   i. Warehouse Receipt No, Depositor Account No (Pledgor Identifier), Pledgee Identifier, Warehouse Registration No, Date of Pledge, Commodity Code & Quality, Quantity to be pledged and Value of Pledge.
d. If application is received in prescribed paper form, Repository participant shall maintain the scanned copy of documents provided by pledgee and archive the paper application in secured location.

5. **Step 5: Intimation to Repository about confirmation of pledge creation**
   a. Upon receipt of duly filled pledge creation confirmation request from pledgee, repository participant of pledgee shall verify and approve the request.
   b. If both Pledgor and Pledgee having accounts with the same repository, the account of the eNWR balance in the pledgor account will be blocked for further transfers and the pledge will be completed in favour of the Pledgee.
   c. If Pledgor and Pledgee are in two different repositories, such confirmation will happen through inter-repository protocol. It shall be the responsibility of repository of the pledgor to hold the eNWRs for and on behalf of the Pledgee and by sending the request, it confirms that it shall do so at all times until the pledge is closed or invoked.

6. **Step 6: Record update by Repository**
   a. In case of full pledge creation request, on receipt of request from both participants of pledgor and pledgee, repository shall create a new eNWR record with Type 'P' (pledged). Repository shall change the status of the old record accordingly. The below is the indicative list of fields that shall be updated in the new record.
      i. Type
      ii. Status
      iii. Pledgee Identifier
      iv. Date of Pledge
      v. Value of Pledge
      vi. Created by
      vii. Creation date
   b. In case of full pledge creation request, below is the indicative list of fields that shall be updated by repository in the old record
      i. Status
      ii. Last updated by
      iii. Last update date
   c. In case of partial pledge creation request, on receipt of request from both participants of pledgor and pledgee, repository shall create new eNWR records, one for the

quantity pledged and one for the quantity that shall not be pledged .Repository shall change the status of the old record .The below is the indicative list of fields that shall be updated in the new record.

      i. Type
      ii. Status
      iii. Pledgee Identifier (For the Pledged record)
      iv. Quantity
      v. Date of Pledge   (For the Pledged record)
      vi. Value of Pledge (For the Pledged record)
      vii. Created by
      viii. Creation date

d. In case of partial pledge creation request, below is the indicative list of fields that shall be updated by repository in the old record.

      i. Status
      ii. Last updated by
      iii. Last update date

Step 7: Intimation to stakeholders

a. Respective repository shall intimate the pledgor, pledgee, repository participant of pledgor and pledgee and WSP regarding pledging of eNWR.
b. RP system, pledgor and pledgee account and WSP Account shall be updated with the new record.
c. Pledgor, pledgee, and WSP shall be informed through electronic communication channel (such as SMS) about pledge creation request

1.1.10. Pledge removal of eNWR

Upon repaying the loan with accrued interest to pledgee (FI), pledgor (eNWR holder) requests FI to close the pledge. Once the pledge is removed, borrower can transfer/trade in eNWRs representing the underlying goods or deal with the eNWR. If the Pledgor and Pledgee are in two different repositories, such removal of pledge of eNWR will happen through inter-repository protocol.

Process Overview:

- Pledgor after repaying the loan, fills up the pledge closure request form (Online/ Physical) and sends a pledge closure request to the RP.
- Pledgor can send full/partial pledge closure request to its RP.
- RP of pledgor validates the request and forward the request to repository electronically.

- Upon receiving pledge closure request from RP of pledgor, repository routes the instruction to the pledgee through RP of pledgee.
- Pledgee agrees to pledge closure request by sending a pledge closure confirmation request to repository participant.
- RP of pledgee validates the request and forward the request to repository electronically.
- If the details in both instructions match, the Repository will close the pledge and update the records of both pledgor and pledgee accordingly.
- In case of partial pledge closure request, Repository creates a record to capture quantity which is still pledged and another record to capture quantity from which the pledge is removed. RP account, WSP account, pledgor & pledgee account get updated with the new record details.
- Repository sends notification message (through SMS, E-mail) about de-pledging of eNWR to pledgor, pledgee and WSP.
- If closure of pledge involves another Repository, the request for closure of pledge will be sent to the other party (pledgor or pledgee), using inter-repository transfer protocol.

Process in Detail:

1. **Step 1: Application for pledge closure of eNWR by Pledgee**
   a. Pledgee (Financial Institution) shall fill up the pledge closure form and shall send to the RP via
      i. Client Management Portal on RP System OR
      ii. Client Management Mobile Application OR
      iii. Prescribed paper form.
   b. Request shall contain at least following information:
      i. Warehouse Receipt No, Depositor Account No (Pledgor Identifier), Pledgee Identifier, Warehouse Registration No, Date of De-pledge and Quantity to be de-pledged, repository id.

2. **Step 2: Intimation to Repository about closure of pledge of eNWR**
   a. Upon receipt of duly filled pledge closure request from pledgee, RP of pledgee shall verify and approve the request. If the pledgee is with the other repository, closure of pledge of eNWR request will be sent to the other repository using inter-repository protocol.
   b. Repository participant of pledgee shall send pledge request to repository:
      i. either by accessing Central Repository System online
      ii. or using its own RP System that connects Central Repository System via API published by Repository

    c. Request shall contain at least following information:

        i. Warehouse Receipt No, Depositor Account No (Pledgor Identifier), Pledgee Identifier, Warehouse Registration No, Date of De-Pledge and Quantity to be de-pledged, repository id.

    d. If application is received in prescribed paper form, Repository participant shall maintain the scanned copy of documents provided by pledgee and archive the paper application in secured location.

3. **Step 3: Intimation to pledgor by Repository about initiation of pledge closure request**

    a. Repository shall intimate RP of pledgor about the closure of pledge request initiated by pledgee.

    b. RP of pledgor intimates pledgor by sending message through electronic communication channel (such as e-mail, SMS).

    c. Message shall at least contain following information:

        i. Warehouse Receipt No, Depositor Account No (Pledgor Identifier), Pledgee Identifier, Warehouse Registration No, Date of De-pledge and Quantity to be de-pledged.

    d. If closure of pledge involves another Repository, the request for closure of pledge will be sent to the other party, using inter-repository transfer protocol.

4. **Step 4: Application for pledge closure confirmation of eNWR by Pledgor**

    a. Upon receiving the message from repository, pledgor (eNWR holder) shall fill up the pledge closure confirmation form and shall send to the repository participant of pledgor via

        i. Client Management Portal on RP System OR

        ii. Client Management Mobile Application OR

        iii. Prescribed paper form.

    b. Request shall contain at least following information:

        i. Warehouse Receipt No, Depositor Account No (Pledgor Identifier), Pledgee Identifier, Warehouse Registration No, Date of De-pledge and Quantity to be de-pledged.

    c. If application is received in prescribed paper form, Repository participant shall maintain the scanned copy of documents provided by pledgee and archive the paper application in secured location.

5. **Step 5: Intimation to Repository about confirmation of pledge closure**

    a. Upon receipt of duly filled pledge closure confirmation request from pledgor, RP of pledgor shall verify and approve the request.

b. Repository participant of pledgor shall send pledge closure request to repository:
    i. either by accessing Central Repository Participant Module online
    ii. or using its own RP System that connects to Central Repository System via API published by Repository
c. Request shall contain at least following information:
    i. Warehouse Receipt No, Depositor Account No (Pledgor Identifier), Pledgee Identifier, Warehouse Registration No, Date of De-pledge and Quantity to be de-pledged.
d. If application is received in prescribed paper form, Repository participant shall maintain the scanned copy of documents provided by pledgor and archive the paper application in secured location.
e. If both Pledgor and Pledgee are having accounts with the same repository, the blocked pledge balance in the pledgor account will be removed immediately. If Pledgor and Pledgee are in two different repositories, such confirmation will happen through inter-repository protocol.

6. **Step 6: Record update by Repository**
    a. In case of full pledge removal request, on receipt of request both from the participants of pledgor and pledgee, repository shall create a new eNWR record with Type 'D' (De-pledged). Repository shall change the status of the old record (with same eNWR) as inactive. The below is the indicative list of fields that shall be updated by repository in the new record.
        i. Type
        ii. Status
        iii. Date of De-pledge
        iv. Created by
        v. Creation date
    b. In case of full pledge removal request, below is the indicative list of fields that shall be updated by repository in the old record.
        i. Status
        ii. Last updated by
        iii. Last update date
    c. In case of partial pledge removal request, on receipt of request from both participants of pledgor and pledgee, repository shall create two new eNWR records one for the quantity that shall still be pledged and one for the quantity from which the pledge shall be removed. Repository shall change the status of the old record .The below is the indicative list of fields that shall be updated in the new record.
        i. Type

ii. Status

iii. Date of De-pledge (For the De-pledged record)

iv. Quantity

v. Created by

vi. Creation date

d. In case of partial pledge removal request, below is the indicative list of fields that shall be updated by repository in the old record.

i. Status

ii. Last updated by

iii. Last update date

7. Step 7: Intimation to stakeholders

a. Respective repository shall intimate the pledgor, pledgee, repository participant of pledgor and pledgee and WSP regarding pledge closure of eNWR.

b. RP system, pledgor, pledgee account and WSP Account shall be updated with new records.

Pledgor, pledgee, and WSP shall be informed through electronic communication channel (such as SMS) about the closure of pledge request

1.1.11. Pledge Invocation

If the loan against the eNWR reaches its maturity without the loan having been repaid or the Pledgor fails to repay the loan, pledgee (FI) can invoke the pledge and take ownership of the goods.

Process overview:

- Pledgee (FI) gives pledgor (Depositor) a notice that it intends to invoke the pledge.
- If the loan is not repaid in spite of the notice, pledgee begins the invocation process.
- Pledgee fills up the pledge invocation form (Online/physical) and sends it to its RP. Pledgee can send full/partial pledge invocation request to its RP.
- Repository participant of pledgee validates the request and forwards the pledge invocation request to repository.
- Repository checks the validity of the pledge invocation request by the pledgee.
- Repository transfers the ownership of eNWR to pledgee.
- In case of partial pledge invocation request, Repository creates new records, in one record ownership is transferred to pledgee and in another record where the ownership of eNWR still lies with pledgor but will be in pledged status.
- RP system, pledgor and pledgee account and WSP account shall be updated with the new record.

- Repository sends notification message (through SMS, email) about pledge invocation of eNWR to pledgor, pledgee and WSP.
- In case the Pledgor and Pledgee are having account in different repositories, pledge invocation request will be completed through inter-repository protocol.

Process in Detail:

1. **Step 1: Application for pledge invocation of eNWR by Pledgee**
   a. Pledgee (Financial Institution) sends a notice to the pledgor to repay the pledge with a specific date. Pledgee also inform the pledgor that if the loan is not repaid by that date, the Pledgee will invoke the pledge.

      In case the pledgor does not repay the loan by the deadline, Pledgee shall fill up the pledge invocation form and send to the repository participant of pledgee via
      i. Client Management Portal on RP System OR
      ii. Client Management Mobile Application OR
      iii. Prescribed paper form.
   b. Request shall at least contain following information:
      i. Warehouse Receipt No, Depositor Account No (Pledgor Identifier), Pledgee Identifier, Warehouse Registration No, Quantity to be pledge invoked and Transfer Date.
   c. If application is received in prescribed paper form, Repository participant shall maintain the scanned copy of documents provided by pledgor and archive the paper application in secured location.

2. **Step 2: Intimation to Repository about invocation of pledge of eNWR**
   a. Upon receipt of duly filled pledge invocation request from pledgee, repository participant of pledgee shall verify and approve the request.
   b. If the pledgor is with the other repository, such pledge invocation request will trigger an inter-repository request and the same will be sent to the other repository for further processing of the instruction.
   c. Repository participant of pledgee shall send pledge request to repository:
      i. either by accessing Central Repository System online
      ii. or using its own RP System that connects Central Repository System via API published by Repository
   d. Request shall at least contain following information:
      i. Warehouse Receipt No, Depositor Account No (Pledgor Identifier), Pledgee Identifier, Warehouse Registration No, Quantity to be pledge invoked and Transfer Date.

e. If application is received in prescribed paper form, Repository participant shall maintain the scanned copy of documents provided by pledgee and archive the paper application in secured location.

3. Step 3: Request verification by Repository

Repository shall do verification of the request raised by pledgee .If the request is valid, and both Pledgor and Pledgee are having account within the same repository, it shall make necessary changes in the account of the pledgee by transferring the quantity to the Pledgee as the owner and shall change the status of the old record. If Pledgor and Pledgee are in two different repositories, such confirmation of pledge invocation will happen through inter-repository protocol. The repository of the Pledgor will have to remove the eNWR from the pledgor's account and provide confirmation to the repository of the Pledgee to credit to Pledgee account. Based on such confirmation, the bookings will happen between the repositories.

4. Step 4: Record update by Repository

a. In case of full pledge invocation request, Repository shall create a new eNWR record with Type 'T' (Transferred). Repository shall change the status of the old record .The below is the indicative list of fields of the new record that shall be updated by repository
   i. Type
   ii. Status
   iii. Transferee Account No
   iv. Created by
   v. Creation date
   vi. Transfer date

b. In case of full pledge invocation request, below is the indicative list of fields that shall be updated by repository in the old record.
   i. Status
   ii. Last updated by
   iii. Last update date

c. In case of partial pledge invocation request, on receipt of request from both participants of pledgor and pledgee, repository shall create two new eNWR records. In one record, the ownership of eNWR shall be transferred to pledgee and in the other one, ownership shall still lie with pledgor.

d. Below is the indicative list of fields that shall be updated in the new records.
   i. Type
   ii. Status
   iii. Transferee Account No (Only in case ownership is transferred to pledgee)

iv. Transfer date (Only in case ownership is transferred to pledgee)

v. Quantity

vi. Created by

vii. Creation date

e. In case of partial pledge invocation request, below is the indicative list of fields that shall be updated by repository in the old record.

i. Status

ii. Last updated by

iii. Last update date

5. Step 5: Intimation to stakeholders

a. Respective repository shall intimate the pledgor, pledgee, repository participant of pledgor and pledgee and WSP regarding pledge invocation of eNWR.

b. RP system, pledgor and pledgee account and WSP account shall be updated with the new record.

Pledgor, pledgee and WSP shall be informed through electronic communication channel (such as SMS) about the closure of pledge invocation request

1.1.12. Rectification of Errors or Omissions

If the information entered in the repository system at the time of creating eNWR has some errors or the information is incomplete, the below process involving eNWR holder, repository participant, repository and WSP may be followed prior to this being partially or fully transferred to another party.

Process overview:

- eNWR holder sends a request (rectification of errors or omissions of eNWR) to RP.
- After validating the request, RP forwards the request to repository.
- Repository forwards the request to WSP system online.
- WSP validates the request. WSP modifies the status of old record in repository system. WSP creates new record in repository system with the correct information
  - With same eNWR, in case there is a change in any one of the attribute which does not have any role to ensure uniqueness of eNWR.
  - With new eNWR, in case there is a change in any one of the attribute that plays a role to ensure the uniqueness of eNWR.
- RP account, WSP account and eNWR holders' account get updated with the new record details.
- Repository informs eNWR holder and WSP through electronic communication channel (such as SMS and email) about the execution of request.

Process in detail:

This process can be split into four cases.

Case1: During Creation of eNWR, if WSP makes mistake in entering the quantity of commodity in the repository system through WSP system / or in the repository provided module, depositor account will be credited with incorrect quantity of eNWR. This could result in two situations. One where excess quantity is credited and the other where short quantity credited.

In case short quantity was credited by WSP, the depositor shall approach WSP and request WSP to make modifications in the quantity of commodity captured in repository system. If the error results in more quantity in the repository system as compared to actual quantity deposited and lying in warehouse, WSP shall, make a request to rectify the error. However, if there were subsequent transfer of eNWRs by the depositor or holder or goods have been fully withdrawn and balance remaining is zero or there were inter-repository transfers, rectification of such errors becomes even more complex. In such situations, WSP will be able to resolve such situations only in consultation with the repositories, on a case to case basis.

Case 2: If there is an error in any of the attributes of eNWR (other than case 1) that does not necessitate issuing a fresh eNWR replacing the earlier one but can be handled by merely changing the attributes, WSP/warehouseman shall need to enter the correct details to rectify the record in repository system with the same eNWR.

Case 3: If there is an error in any of the attributes of eNWR (other than case 1 & 2 above) that necessitates issuing a fresh eNWR replacing the earlier one from all the account holders, WSP/warehouse shall need to debit the entry from the account(s) where balances exist and create a new eNWR with correct details and credit the account(s) with the newly created eNWR. In this case, a new unique eNWR shall be generated.

Case 4: There could be cases when wrong transfer takes place from one account to another due to mistake by the account holders or by the RP. In this case error rectification requires a request from the account holder whose account has been wrongly debited, an undertaking from the account holder (in case mistake is by the account holder / RP (in case mistake is by RP) indemnifying the repository for reversal from the account that was wrongly credited. RP may forward these details to repository who in turn will advise the RP whose account has been credited to reverse the entry back to original account holder. There can be situations where reversal is not possible because the goods may have been withdrawn or transfer happened to clearing house and thereafter to other transferees which may become difficult to identify the holder of the eNWR. In such cases, the holder or RP may have to resort to other legal measures.

Solution:

All the situations explained above are exceptional in nature and dealing with such situations should be left to repositories to design and implement. Under all these situations, repository shall be indemnified by WSP/warehouse or RP or the account holder depending on the reasons for the error. Rectification of errors will be carried out only on a best effort basis and changes can be effected only if repository approves of such changes. Thus, repository may accept or reject such requests to maintain the integrity of its system. Even if such changes are permitted, it may be possible only to the extent of holdings in the repository system as compared to original issue of eNWR as there are chances of withdrawal of goods. If for any reasons rectification of errors is not possible, the holder/WSP/warehouse/RP may have to resort to other legal recourse or measures befitting the case.

Intimation to stakeholders

    a. If the error rectification is due to mistake by WSP/warehouse, it shall be the responsibility of WSP/warehouse to intimate the clients whose accounts are rectified.

    b. If the error rectification is due to mistake by RP or due to mistake by the account holder, it shall be the responsibility of RP to intimate the clients whose accounts are rectified.

    c. Repository may also advice the client or WSP or warehouse or RP if it feels necessary to do so.

    d. RP System, clients' accounts, WSP/warehouse account as the case may be, shall be updated with the new record details

1.1.13. Account Statement Dissemination

    1.1.13.1. By Repository Participant

The participant shall furnish a statement of accounts including transaction statement and holdings statement to every client, who has opened an account with it, giving the details of the eNWR-wise transactions and balances, in the accounts of the clients. Such a statement shall be furnished to the clients at monthly intervals unless the client and the participant have agreed for provision of such statements at shorter intervals provided however, if there is no transaction in the account, or if the balance has become nil during the year, the participant shall send one physical statement of holding annually to such clients and shall resume sending the transaction statement as and when there is a transaction in the account.

The participant may provide statement of accounts including transaction statement and holdings statement to the clients in electronic form, if opted by the Client. However, if client is desirous of receiving such statements in physical form, participant shall be duty bound to provide the same.

- **Physical**: If client is desirous of receiving statements in physical form, or if the participant is not able to provide such statement to its clients by email or on website or by SMS due to any reason, participant shall be duty bound to provide the statement in physical form.
- **Online**: Participant can provide statements to its clients either through email or through its website. Participant needs to ensure that statement must be digitally signed in accordance with Information Technology Act, 2000. If participant provides statements through email, participant needs to ensure that statement should be password protected. In case if the participant is providing such statement through website, participant must ensure the below points:
  - o Implement Secure Socket Layer (SSL) security for Internet facility featuring site authentication, encrypted communication and appropriate client authentication so as to restrict the access of such statement only to the Client.
  - o Such statement should be made available on the website for a period of at least 12 months.
- **Mobile**: Participant may provide statement of accounts including transaction statement and holdings statement to the Clients through SMS if opted by the Client.

1.1.13.2. Repository

Repository shall send update via SMS and email to client in the below scenarios:

- Creation and Issuance of eNWR.
- Amendments on eNWR
- Pledge/ de-pledge of eNWR
- Invocation of Pledge
- Transfer of eNWR, both off market and market transfers
- Rectification of errors/ omissions in eNWR
- Cancellation of eNWR

Additionally, repository will provide quarterly statement to client via email and to registered postal address, if opted for, via mail.

Statement of Account issued by Repository or repository participant shall at minimum contain below fields.

- Date of transaction
- eNWR Number
- Commodity Code
- Commodity Quality

- o Original balance
- o Transferred balance
- o Closing balance
- o Free/Pledged/Invoked
- Account status: Active/Frozen/Suspended
- Value of Goods

1.1.14. WSP Management

1.1.14.1. On-boarding of WSP

The WSP/Warehouse needs to be registered with all the repositories which are registered with WDRA as per the provisions under the guidelines. Warehouse or WSP (for easy reference WSP is used) needs to register itself with repository in order to issue eNWR to the depositor. The process followed by WSP in order to get registered with the repository is as defined below:

Step 1: WDRA issues registration certificate to WSP for particular warehouse post verification of application and supporting documents provided by WSP. WSP needs to submit security deposit to WDRA in order to start warehouse business.

Step 2:

a. Once WSP receives certificate of registration from WDRA, WSP applies through Repository System Portal for registration with repository.
- Name, address and contact details of the warehouseman.
- Name of WSP and names of warehouses that will be operated under WSP, along with addresses and contact details
- Mobile number of warehouseman/authorised person of WSP
- Email id of warehouseman/authorised person of WSP at the central location as well as at each location of warehouse
- PAN number of Warehouseman/WSP
- AADHAAR of WSP (in case of individual)
- AADHAAR of Authorised representative of WSP (in case of company)
- Total capacity of each warehouse.
- Goods permitted to be stored.
- Warehouse Registration Number issued by WDRA
- Registration validity of the warehouse.
- Rate of storage and handling charges;

- Name of the insurance company indemnifying for fire, flood, theft, burglary, misappropriation, riots, strikes or terrorism;

   b. Repository will validate the information provided by WSP/Warehouseman and then opens the WSP/Warehouse account in the Repository System.

Step 3:
   a. WSP will be needed to submit any additional information required by Repository to complete the registration process.
   b. Repository System will capture WSP's email address and mobile number for sending intimation in future.
   c. A verification mail will be sent to WSP's e-mail address to complete the Registration process

Step 4:
   a. The verification email will contain the link to the online payment.
   b. WSP needs to pay the registration fee via online payment gateway made available by Repository.

Step 5:
   a. On successful payment of repository fees, Repository activates the WSP/warehouse in repository system, and sends all relevant information relating to registration of the WSP/Warehouse to the e-mail address of WSP/Warehouse, along with one-time usage password.
   b. E-mail ID of WSP/Warehouse will be the user name of the WSP/Warehouse for any further transaction online.
   c. Upon first log-in, WSP/Warehouse will be mandated to change the one-time usage password provided with registration.

Step 6: Repository sends a notification message to WSP/Warehouse through electronic communication channel (SMS, email). Message shall contain the below field
- WSP ID.
- Warehouse ID.
- Repository ID.
- Account no opened for warehouse in repository system.
- Registration validity

1.1.14.2. Repository Update by Warehouses the details of the Warehouse Receipt

To issue Warehouse Receipt against the goods stored in warehouse, warehouses should use the Repository System to issue eNWR. Using same system to issue WR is proposed because similar information about the commodity, warehouse, depositor and receipt can be captured at the time of issuing WR. It also helps to standardize the information that warehouse needs to send to WDRA for regulatory purpose.

Below are the list of fields maintained by repository for WR.

- Warehouse Receipt No
- Receipt Date
- Negotiable Receipt
- Status
- Warehouse Registration No
- Warehouse Registration Validity
- Warehouse Name
- Warehouse Address
- Warehouse Location
- Depositor Account No
- Depositor Name
- Depositor Address
- Commodity Code & Quality
- Unit of Measure
- Quantity
- Tare Weight
- Number of Packages or Bags
- Estimated Value at deposit
- Current Estimated Value
- Lot Number
- Private Marks
- Storage Charges
- Handling Charges
- Insured for Fire/ Floods/ Theft/ Burglary/ Misappropriation/ Riots/ Strikes/ Terrorism
- Insurance Company Name
- Insurance Policy No
- Insurance Coverage Amount
- Insurance Validity From

- Insurance Validity To
- Storage Date From
- Storage Date To
- Validity
- Assaying Date
- Assaying Type
- Moisture at Deposit
- Moisture at Lifting
- Auto ID Type
- Auto ID Code
- Pledgee Name
- Pledgee Identifier
- Date of Pledge
- Value of Pledge
- Date of de-pledge
- Authorization No for Delivery
- Instructions for Delivery

1.1.15. Reconciliation between Repositories

If in case there are more than one repository servicing the clients, there could be situations where transactions happen between two accounts maintained at different repositories. This situation arises mainly when one client wants to transfer eNWR from repository A and the receiving client is in repository B. This situation could arise due to off-market transfers, market transfers as well as pledges. To handle such transactions, repositories must establish necessary IT infrastructure and agree on a standard inter-repository protocol so that there is clear responsibilities with timelines. This exercise calls for mutual co-operation and support and the cost of such infrastructure will have to be shared by the repositories. In case there are more than 2 repositories, it may necessitate creation of a Hub to which the repositories will send inter-repository transactions. The Hub will act as a switch that just keeps pushing the instructions to the right destination. Repositories will agree to set up this Hub, agree on a common protocol standards and share the cost of Hub. If there are differences and disputes, WDRA may act as an arbitrator or may appoint a committee that will help resolve such issues.

- Reconciliation between repositories takes place when there is transfer of eNWR between two accounts opened in two different repositories.

- For crediting a clearing member account or a client account maintained with the other repository, the client needs to submit 'Inter-Repository Instruction' to its RP. Similarly for transferring eNWRs from clearing member account to a beneficial owner account or to a clearing member account with the other repository, the clearing member needs to submit 'Inter-Repository delivery instruction' form to its RP.

- The Client or the clearing member should have enabled standing instructions or give Inter-Repository receipt instruction to its RP.

- For creating a Pledge where the client or the pledgee is with one repository and the opposite party i.e. Pledgee or client is with the other repository, there is a need to submit inter repository pledge creation request. It is also necessary that all further transactions to either close the pledge or invoke the pledge, similar instructions will have to be given.

- The WSP is informed about the transfer by both the repositories and it amends its records accordingly.

- If there are two repositories and they are connected to each other, batches to effect inter repository transfer are exchanged on each working day. In case there are more than two repositories, there shall be a hub that will act as the conduit to pass on instructions between two repositories.

- In the online inter repository transfer module, inter repository transfer instructions for the day are exchanged online between the repositories. Thus, the instructions executed by RPs may get settled at shorter intervals.
- Repository will update warehouse for every transfer of eNWR between accounts. Any transfer of title of eNWR will be updated real-time by the repository to the warehouse.

1.1.16. Record keeping

1.1.16.1. Repository

The repository shall maintain the following records with respect to the eNWR for a period of five years. After five years, the electronic record can be archived. The repository should not extinguish any electronic records. Physical records may be destroyed after five years:-

- eNWR record.
- WSP / Warehouse account record.
- Repository participant record.
- All transaction details such as, transfers, creation of eNWR balances, pledges etc.
- All opening of accounts and closure of accounts, freezing and unfreezing of accounts, demographic information of the account holders and all modifications thereof
- All activation as well as de-activation of RPs, WSP/Warehouses/warehouse receipt

Repository can extract different information from the above records. Such as number of pledged eNWRs, number of expired eNWRs, number of eNWR traded on exchange, number of warehouse /WSP registered with the repository, account no for the WSP on repository, number of repository participant registered with repository and account no for the repository participant on repository etc.

1.1.16.1.1. Manner of Keeping Records

The records specified under requirement Section 1.1.14.1 should be maintained in electronic form. Repository shall ensure that the integrity of the data processing systems is maintained at all times and take all precautions necessary to ensure that the records are not lost, destroyed or tampered with and ensure that sufficient backup of records is available at all times at a different place.

1.1.16.2. Repository Participant

The repository participant shall maintain the following records for a period of five years. After five years, the electronic record can be archived. The repository participant should not extinguish any electronic records. Physical records may be destroyed after five years:-

- Delivery/Receipt instructions given by eNWR holder.
- Forms submitted by the clients to the participant for -
- Opening of accounts with the participant. The account opening and KYD document shall remain with the repository participant perpetually. Thus, even if the account is closed, account opening related documents cannot be destroyed.
- Closing of accounts with the participant;
- Freezing of accounts with the participant;
- Unfreezing of accounts with the Participant.
- Copies of correspondence from the clients on basis of which clients details were updated in RPM.
- Identity and address proofs submitted by the depositor for KYC process.
- Forms received in respect of transfer of eNWR.
- Forms received in respect of pledge creation, pledge closure and pledge invocation.
- Forms received in respect of rectification of errors / omissions in eNWR.
- Forms received in respect of cancellation of eNWR.
- Instructions received from the clearing member to transfer balances from the pool account to the delivery account of the clearing member in order to enable it to meet its obligations to the clearing entities.
- Instructions from the clearing member authorising the transfer of eNWR from the pool account of the clearing member to the accounts of its clients.

1.1.16.2.1. Manner of Keeping Records

The records specified under requirement Section 1.1.14.2 may be maintained either in physical or in electronic form. Where the records are kept by the repository participant in electronic form, it shall do so with the prior approval of the regulator and shall ensure that the integrity of the data processing systems is maintained at all times and take all precautions necessary to ensure that the records are not lost, destroyed or tampered with and ensure that sufficient backup of records is available at all times at a different place. However, the prior approval of the regulator is not required if the repository participant has been permitted to receive instructions from the depositor in an electronic form.

1.1.16.3. Warehouse

The warehouse shall maintain the following records with respect to the eNWR for a period of five years:-

- KYD document of the depositor submitted when he collects the physical goods against cancellation of eNWR. For issuance of eNWR, the KYD will be done by RP at the time of account opening.
- Record of physical goods deposited in warehouse against the issued eNWR.
- Rectification of errors
- Records of certifications received from Assayers
- Records regarding weighing of goods
- Records related to all WDRA requirements for creation of eNWR.

1.1.16.3.1.   Manner of Keeping Records

The record (KYD document of the depositor) specified under requirement Section 1.1.16.3 may be maintained either in physical or in electronic form. Where the records are kept by the warehouse in electronic form, it shall do so with the prior approval of the regulator and shall ensure that the integrity of the data processing systems is maintained at all times and take all precautions necessary to ensure that the records are not lost, destroyed or tampered with and ensure that sufficient backup of records is available at all times at a different place.

Record of physical goods deposited in warehouse against the issued eNWR should be maintained in electronic form. Warehouse shall ensure that the integrity of the data processing systems is maintained at all times and take all precautions necessary to ensure that the records are not lost, destroyed or tampered with and ensure that sufficient backup of records is available at all times at a different place.

1.2. Integration Requirements for Repositories

A repository will be required to exchange information, using non-repudiable mechanisms, on a regular basis with:
- Other repositories
- WDRA & other regulators
- Warehouses & WSPs
- Repository Participants for the Repository

Similarly, a repository participant (RP) will be required to exchange information with:
- Clearing Entities
- WSP
- Account Holders

The repository module of the repository will be required to provide the integration interfaces, for interacting with external entities.

Interactions between the repository and other entities need to follow certain integration principles:

- **Standards-based:** Integrations should be based on open-standards widely adopted by the industry;
- **Flexible:** Integrations should be flexible, i.e. should be loosely-coupled, performant & scalable;
- **Extensible:** Integrations should be extensible, i.e. should be easy to change;
- **Backward Compatible:** Integration interfaces should be backward compatible so that external applications that use the interfaces continue to work with new versions of the interfaces;
- **Deterministic:** All repository APIs should provide a response to every API request.
- **Re-entrant:** All entities exchanging information with the repository using APIs shall maintain a log of all requests for which a response hasn't been received so that these requests can be re-transmitted to the repository. The repository should check for & reject duplicate requests.
- **Device-agnostic:** Integrations should be device-agnostic, i.e. it should be possible to view the status of an eNWR on a mobile device or portal using the API provided by the repository.

1.2.1. Inter repository protocol

A repository will need to reconcile with other repositories for all eNWR transfers when the transferee is in the target repository.

The interface between repositories should use a message-based queue for real-time publish & subscribe of XML messages, which contain details of eNWR transfers, in an asynchronous mode. The message-based queue will be configured with the send & receive locations, where the message is sent from the send location to the receive location. Message-based queuing technology is available in all middleware frameworks and the inter-repository interface should use the message queues in enterprise class middleware frameworks for guaranteed delivery of messages.

An XML schema design will be defined by WDRA or one of the repositories for the structure of the message.

Inter-repository interfaces can be one of the following types:

a) **Hub and Spoke Model**

As long as there are 2 repositories, there need not be a Hub to route the transactions between the repositories, as both of them can establish an inter-repository transfer protocol between them. However, whenever more repositories are expected to be licensed in future resulting in

more than 2 repositories, a hub & spoke model for message transfer becomes a more scalable option. In this case, a hub, in the form of a message switch, operates at a central location (WDRA or one of the repositories or any other entity as may be approved by WDRA) and routes all messages received at the hub to the intended destination.

To use the hub & spoke model, each repository needs to define a message queue between the repository and the hub. All messages sent from the repository should have the hub as the destination. The hub will use an Enterprise Service Bus (ESB) type of infrastructure to transform the messages and route it to the target repository using attributes in the message.

b) Point-To-Point Connection

A point-to-point inter-repository connection will enable a message queue between the repositories. The message queue will be configured with the send location and the receive location and all messages are routed directly from the send location to the receive location

1.2.2. Interface with WDRA

A repository will need to provide disclosure reporting to WDRA on a regular basis. This should include information such as:

- Financial statements such as balance sheets, income statement, etc.;
- Details of change in ownership, net-worth, key managerial personnel;
- Details of litigation, civil or criminal cases against the licensed repository;
- Details of all WRs issued, transferred, pledged, de-pledged, extinguished;
- KYD related information for depositors;
- Beneficiary account information such as accounts created, closed, etc.

The repository should provide an API that generates an XML report for a specified date range. The XSD for the disclosure report will be defined by WDRA.

Following API should be defined by the repository:

- GetDisclosureReport(FromDate, ToDate)
    - Parameters – FromDate: start date for report; ToDate: end date for report;

1.2.3. Interface with RP

A repository will need to provide an online interface to all its RPs for the following information:

- Depositor Accounts created, modified or closed;
- All eNWR transactions such as transfers, pledge, de-pledge;

Following APIs need to be defined by the repository:

- CreateDepositorAccount(DepositorAccountNo, DepositorName, DepositorAddress, DepositorAADHARNo)
  - Parameters – DepositorAccountNo: unique account no for depositor (also identifies RP ID, RP branch ID); DepositorName – name of depositor; DepositorAddress – address of depositor; DepositorAADHARNo – AADHAR number for identity & address proof;
- UpdateDepositorAccount(DepositorAccountNo, DepositorName, DepositorAddress)
  - Parameters – DepositorAccountNo: unique account no for depositor (only to uniquely identify the account, this cannot be updated); DepositorName – name to be updated (optional); DepositorAddress – address to be updated (optional)
- CloseDepositorAccount(DepositorAccountNo)
  - Parameters – DepositorAccountNo: unique account no for depositor;
- ViewNWRStatus(HolderAccountNo, WarehouseReceiptNo)
  - Parameters – HolderAccountNo: unique account no for current holder of warehouse receipt; WarehouseReceiptNo: unique identifier for warehouse receipt;
- TransferNWR(WarehouseReceiptNo, TransferorAccountNo, TransferUnit, TransferQuantity, TransfereeAccountNo, TransferDate)
  - Parameters – WarehouseReceiptNo: unique identifier for warehouse receipt; TransferorAccountNo: account no for transferor; TransferUnit: unit of measure for transfer; TransferQuantity: quantity for transfer; TransfereeAccountNo: unique account no for transferee; TransferDate: date of transfer of warehouse receipt;
- LockNWRForPledge(WarehouseReceiptNo, PledgeeName, PledgeeIdentifier, Date)
  - Parameters – WarehouseReceiptNo: unique identifier for warehouse receipt; PledgeeName: name of pledgee; PledgeeIdentifier: unique identifier for pledgee ; Date: date of lock-in of NWR;
- InvokeNWRPledge(WarehouseReceiptNo, PledgeeName, PledgeeIdentifier, Date, PledgeValue)
  - Parameters – WarehouseReceiptNo: unique identifier for warehouse receipt; PledgeeName: name of pledgee; PledgeeIdentifier: unique identifier for pledgee; PledgeValue: value of loan for which NWR is being pledged;
- ReleaseNWRPledge(WarehouseReceiptNo, Date)

- o Parameters – WarehouseReceiptNo: unique identifier for warehouse receipt; Date: date of release of pledge

1.2.4. Interface with Warehouses

A repository will need to provide an online interface to warehouses for the following information:

- NWR transactions such as Create, Extinguish, Delivery;

Following APIs need to be defined by the repository:

- CreateWarehouseReceipt(WarehouseReceiptNo, ReceiptDate, NegotiableReceipt, WarehouseRegistrationNo, DepositorAccountNo, CommodityCode, UnitofMeasure, Quantity, EstimatedValueAtDeposit, LotNumber, Validity, AuthorizationNo)
  - o Parameters – WarehouseReceiptNo: unique identifier for warehouse receipt; ReceiptDate: date of receipt; NegotiableReceipt: whether the receipt is negotiable ('Y') or not ('N'); WarehouseRegistrationNo: unique identifier for warehouse provided by WDRA on registration; DepositorAccountNo: unique account no for depositor; CommodityCode: unique commodity code & grade for deposited commodity; UnitofMeasure: unit of measure for deposited quantity (e.g. MT, quintals, etc.); Quantity: quantity deposited as specified by UnitofMeasure; EstimatedValueAtDeposit: estimated value of commodity at deposit; LotNumber: unique lot number for commodity in the warehouse; Validity: validity of the receipt in days; AuthorizationNo: authorization number for delivery;
- DeliverAgainstWarehouseReceipt(WarehouseReceiptNo, UnitofMeasure, Quantity, Date, AuthorizationNo)
  - o Parameters – WarehouseReceiptNo: unique identifier for warehouse receipt; UnitofMeasure: unit of measure for delivery; Quantity: quantity delivered as specified by UnitofMeasure; Date: date of delivery; AuthorizationNo: authorization number for delivery;
- ExtinguishWarehouseReceipt(WarehouseReceiptNo, Date)
  - o Parameters – WarehouseReceiptNo: unique identifier for warehouse receipt; Date: date when the receipt should be extinguished

1.3. Functional requirements for the e-auction platform

i. **User Registration**

    a. **Bidder Registration**

- To participate in the auction process, the user must register with the auction platform.
- The user need to register using details such as name, address, PAN number, Bank account number , mobile number, e-mail id, goods in which he is interested to bid, etc.
- After entering the details, the bidder is required to upload a scanned image of PAN card, proof of address, etc.
- Once the authentication is accepted, the bidder gets notified through SMS and e-mail for account activation
- The bidder will have to change the password in the first login and the password will have to be changed every 90 days
- The user can alter the profile related to goods in which he is interested after activation of account. Based on the selection of goods, the auction platform will notify the bidder about the scheduled auctions through e-mail

b. Seller Registration

- For registration, seller should fill up a form provided by the auction platform. The form should contain details like name of seller, address, type of entity, bank account details, etc along with relevant supporting documents as specified by the auction platform from time to time
- Upon acceptance of the application of the registration form and documents, the e-auction platform will create user id and password and send to the seller at his registered email id

ii. User Profile

a. Bidder Profile

- After login to the system, the bidder will have facility to view his profile details where he can select goods of his interest
- The bidder can change the password
- The bidder can view the list of goods offered for sale
- The bidder will have the option to create a Demand for auction in interested commodity, facility to close a created demand and facility to view their demand list.
- The bidder can view the Request for Quote list where the bidder can place bids against the goods for sale. This will include the quantity and the price against the respective commodity
- The bidder can see the bids of other participants and can revise order accordingly
- The bidder can view the various reports to their traded positions, his obligation and final settlement

b. Seller Profile

- After login to the system, the seller will have facility to view his profile details where he can select goods that are being placed for sale
- The seller will also have the facility for changing profile items like password, bank details, etc.
- The seller can view the eNWR that is being put up for sale and can verify the quantity of goods put up for sale
- The seller will have the facility to add a new eNWR for initiating the auction process
- The seller will have the facility to see the status and list of bids being put up for sale of the particular commodity

iii. Transfer of eNWR

- The seller needs to enter the details of eNWR for which the auction is to be conducted
- The system will validate the authenticity of eNWR by connecting with repository on which the eNWR is stored and the bank which has marked the lien on the eNWR. When the pledger defaults, the pledge is invoked and the title moves to the pledge. So there is issue of lien marking. Lien is marked when it is pledged.
- The details of the commodity collateral of the eNWR will be displayed on the seller dashboard along with the status of eNWR
- Only when the eNWR is authorised by the bank and repository to be auctioned, the initiation of auction will commence on the e-auction platform

iv. Creation of RFQ by Seller

After the authentication of eNWR, the system will permit the seller to initiate RFQ. The details that will be visible in RFQ will include:

- Total available quantity for auction
- Auction Start Date and Time
- Auction End Date and Time
- Settlement Date
- Base Price to the set for the particular commodity
- Minimum Lot Size for bidding
- Margin amount to be deposited to participate in the auction process

Once the details are entered by the seller and submitted, the e-auction platform will trigger a mail to the interested bidders

v. View of RFQ by Bidder

- The bidder will be able to view all scheduled RFQ for goods, where auction is to be initiated
- Upon the initiation of auction, the bidder can place bid (Quantity, Price) on the commodity that is placed for auction
- The e-auction platform will not accept any orders below the base price as specified by the seller
- The bidder will have the option to revise/cancel the bids placed by him
- During the auction process, the bidder will only be allowed to better the price
- All the bids will be in the system till the end of auction, unless cancelled by the bidder
- At end of auction session, the bids above base price will be marked in descending order till the seller quantity is available. The auction will be matched on price time priority logic.
- At end of session, the highest bidders are identified by the system. The result of e-Auction shall be available on the e-auction web site. User(s) can view the results using their login credentials
- The final results of the e-Auction are binding on all bidders and any request for cancellation received after the conclusion of an auction session shall not be entertained

vi. Post Auction Activities

- The e-auction platform will send notification to the successful bidder upon the completion of the auction at the end of the day.
- Once the successful bidder is notified, the bidder will have to transfer the margin amount as specified by the e-auction platform within the defined timeframe.
- Bidders will have to transfer the amount using only the payment gateway provided by the e-auction platform
- In case of non-transfer of pending settlement amount by the bidder within the specified settlement date, the margin amount will be forfeited. In such case, the deal will be cancelled and the forfeited amount will be transferred to the seller.
- Seller will be able to see in the system details of remittance of funds by the buyers. Based on this, the seller will be required to generate transfer order on the eNWR
- Once the transfer order of eNWR is generated, the e-auction platform will notify the repository and the repository participant.
- The buyer can download such Transfer Order from the system. He is required to produce such Transfer Order along with his proof of identity before the warehouse manager for the purpose of delivery of goods.

- After delivery of goods, buyer needs to enter confirmation about receipt of commodity in the system
- Once the confirmation is provided by the buyer, the e-auction platform would then transfer the complete amount to sellers account

vii. Reports to be generated post auction activities

Both the bidders as well as sellers will be able to view the reports related to trade and trade settlements. The various reports that will be available for viewing will be:

- **E-Auction Report** - This report will contain information about successful bids to an RFQ. This gives an indication of the potential bidder(s) on completion of the auction
- **Obligation report** - This contains information about the bidder(s) whose margin payment has been successfully transferred
- **Settlement report** - This contains information about the trades which have been successfully settled
- **Bank transaction** - This contains information to the user about the bank transactions carried out by him